

EXTECH[®]
INSTRUMENTS
A FLIR COMPANY

Celebrating Our
40th
Anniversary

**THE BEST TEST AND
MEASUREMENT TOOLS
JUST GOT BETTER**



Catalog 38

MULTIMETERS | CLAMP METERS
THERMOMETERS | AIRFLOW METERS
LIGHT METERS | SOUND METERS
WATER QUALITY TESTERS
TACHOMETERS | HUMIDITY &
MOISTURE METERS | VIDEO
INSPECTION CAMERAS

www.extech.com

OUR PROMISE INNOVATION, QUALITY, TRUST



It's All About You!

Please join me in celebrating Extech's 40th year in business. Your loyalty to Extech and your expectations for rugged, durable, and accurate Extech meters and testers have kept us focused on building the best test and measurement products on the market. Extech is stronger than ever: our business continues to grow exponentially and it's all because of you!

Thanks to all the men and women who choose to use Extech every day on the job in an increasingly broad array of industries. Our thanks go out to the dad who recommends Extech to a son or daughter entering the trades, to the tech school using Extech in the classroom, and to the pro who says to a co-worker, "Try my Extech."

We want to promise you the best quality—not only in our meters, but also in the many services we provide to support our customers. Our goal is to earn your trust and loyalty as lifelong Extech customers.

We're achieving this with a product development attitude that is all about innovation. There are more "me-too" meters on the market than ever before. Extech products stand out with capabilities you won't find anywhere else—functions designed to help you do more—faster. I invite you to browse through our catalog with over 50 new products and see how the best test and measurement tools just got better.

Arpineh Mullaney

Vice President

Extech Instruments Corp., a wholly owned subsidiary of FLIR Systems, Inc

NEW DRIVEN



EX570 Waterproof/Drop-proof

EX845 METERLINK via Bluetooth®

A History of Innovation

If you are thinking about buying a new test and measurement tool, look for the brand with a long-standing history of innovative tools, rugged capabilities, and sensible value. Look for Extech.

Since 1970, Extech has been constantly redefining the test and measurement market by pioneering bold new technologies in testers and meters.

Historic Firsts from Extech

Extech is the only test equipment maker to offer a range of electrical, industrial, and HVACR meters with a built-in infrared thermometer. Extech is the only meter maker to offer a DMM with wireless datalogging capabilities. For HVAC professionals, Extech introduced a 5-in-1 meter that helps them "get more done."

For every tech who has lost a meter after it



CUSTOMER FEEDBACK

PRODUCTS

BY INNOVATION



M0297
Built-in IR



HDV640W
High Resolution, waterproof, drop-proof



VIR50
Built-in Video IR



SDL800
Datalogging to MS Excel via SD Card

fell in a puddle, we created the EX530, a drop-proof and water-proof multimeter. When Extech introduced an award-winning video borescope with a wireless, detachable display and digital photo/video camera capabilities—all at a price that is a fraction of comparable models—customers opted for Extech in record numbers.

In 2010, Extech transformed the relationship between meter and infrared camera by offering MeterLink, a Bluetooth-based technology that wirelessly sends readings from Extech clamp meters and moisture meters to FLIR infrared cameras for accurate, coordinated documentation.

Look for products with the METERLINK logo in this catalog.



Innovation for the Best

With over 40 years of historic firsts, only Extech is positioned to take the lead in innovation when it comes to test and measurement. At Extech, test equipment is our *only* business—it's what we know best. Hand tool and power

tool makers that are now selling meters just can't say that.

At Extech, we focus on being the best, and we are achieving that by driving new technologies in test and measurement tools to make your job easier with maximum functionality and no compromises—for less than other top-tier brands.

More and more professionals in electrical, HVACR/mechanical, repair, plant maintenance, building inspection, restoration, engineering, lab, water quality, and R&D are making the switch to Extech. See why, in page after page of innovative products in this catalog.

Awards

Extech innovation is recognized around the world by a range of industry publications and professional organizations.



“The IR feature in a multimeter format is a great idea. It eliminates carrying multiple pieces of equipment—a real time saver!”

Mike H., New York

“The screen and recording options of your BR200 make the presentation to homeowners much easier and more professional.” Rich C., New York

OUR COMP

FOCUSED ON QUALITY

Multimeters, Clamp Meters, Thermometers, Humidity & Airflow Meters, Light Meters, Sound

CUSTOMER FEEDBACK




“We could use this BR200 for a thousand different applications. The most important feature is our ability to photo-document what we see through the borescope. Great product!” Corey R., Mold Inspector, Maryland



 CALIBRATION TRACEABLE TO **NIST**



NIST-traceable calibration services are available on nearly all Extech product categories. Extech offers fast turnaround, global shipping, and convenient calibration reminder notifications. Look for the  logo throughout the catalog denoting products available with NIST-traceable certification. (See page 144 for a complete listing.)

RAMMY

Meters, Air & Water Quality Testers, Borescopes, Tachometers, Moisture Meters, and more...

“The EX330 can measure as low as 1pF, not available on any other meter with capacitance. We have been so happy with Extech meters that we bought 8 to 10 more!” **Martin E., California**

“The Wireless detachable screen rocks!”
Mike H., New York, commenting on the Extech BR200 borescope.

DRIVEN TO BE THE BEST

A Quality-Focused Company

When you buy an Extech test instrument, you receive a commitment to quality that extends beyond the meter: we're committed to a company-wide focus on quality.

Based in the Northeast United States for forty years, Extech has been committed to an end-to-end, start-to-finish approach to quality. In fact, Extech is proud to be ISO 9001:2008-certified by TÜV SÜD America for its Quality Management System which includes:

- Design and Development
- Sales
- Manufacturing
- Distribution
- Service

Quality Design

At our New England offices, Extech engineers design innovative new products that combine features and functions our customers ask for, and no one else offers.

NIST-Traceable Calibration Services

For many professionals, the quality of your calibration is as important as your meter. Our in-house calibration laboratory is focused on configuring your meter to reliably and accurately conform to NIST certification standards.

For NIST Calibration and repairs, email repair@extech.com or call 781-890-7440 x.210.

Quality Control

Our Quality Control department ensures that products are inspected to meet our engineers' exacting quality specifications.

Extech.com: Best-Ranked Website

Visit Extech.com and discover our easy-to-use and information-packed website. We're proud that our site was ranked the top test and measurement website by *Industrial Equipment News*. See for yourself.



Inspect heat exchangers | Education Labs | Measure crawl space humidity | Troubleshoot | Fire alarm systems | Read amps on a panel | Residential electrical | Auto repairs | Construction material testing | Measure foot-candles on LEED jobs

Measure compressor current draw | Measure superheat | Commercial lighting installations Outdoor HVAC/mechanical repairs | Repair heat pumps, chillers, boilers | Fire investigation inspections | Install card access systems | Wastewater

OUR CUSTOMERS BUILDING TRUST



More Choices, or More Confusion?

The test equipment market is changing rapidly. Practically every day, another brand appears with new multimeters and other test and measurement tools. Some are from well-known hand tool or power tool brands that now want to sell you meters and testers. Others are untested, no-name brands really intended to benefit online auction sellers more than you.

With all these new options, you may have questions about which brand of test and measurement tools you should trust for your job and your budget.

40 Years of Building Trust

Extech is proud to have built a legacy of long-term customers, father-and-son customers, technical school customers, owner/operator customers, and large “standardized” companies.

Since 1970, our loyal customers demonstrate the relationship- and trust-building that make Extech the stand-out brand for the best test and measurement

products from the best company. That relationship-based approach has also helped us build an immense global distributor network over the years making it easy to find an Extech product in your town or online.

World-Class Customer Support

Questions about your Extech meter’s operation? Need service? Call us. Extech’s helpful, New England-based support teams strive to help you quickly and efficiently. Contact us: Email support@extech.com or call 781-890-7440 x200

More Users Make the Switch

Across industries, and around the world, more and more users are making the switch to Extech testers and meters. Now, they’re telling their stories on Planet Extech.com. Read some of the compelling “switch stories” on this page and throughout the catalog.

treatment plant repairs | **Repair VFDs**
| Waterfront resort maintenance |
Vitamin pH testing | Biodiesel facilities
maintenance | Test electric coming
into AC units | Maintain heater plate
temperatures | **Generator repairs**
| Calibrate pressure transmitters



Extech is committed to our customers, from the beginning of their technical education and training throughout their careers. Visit Extech.com to learn about our Educational Discount program with added savings for students and apprentices.

Pioneering T&M Social Networking

Along with our Facebook and Twitter pages, we've recently introduced PlanetExtech.com, a vibrant social networking site where Extech fans and users can connect to learn about Extech-related news, read user stories, ask tech questions, and enter frequent contests and giveaways. No other test equipment company stays connected to you like Extech.



CUSTOMER FEEDBACK

"It's a best buy. I have used other brands, and I like this meter better. Keep up the good work. We field techs appreciate you listening and striving to make better tools for us."

Ken M., Purvis, Mississippi

"I use my Extech for troubleshooting traffic signal equipment. I switched to Extech because I can carry one meter that does the work of three. Get rid of all your meters and get one, the EX840."

Brian F., Ohio

MultiMeter Selection Guide Pick the right multimeter for your application (see compact multimeter selection guide on p.16)

Model	EX570	EX540	MM560A	MM570A	MP510A	MP530A	EX520	EX530	EX410	EX411	EX430	EX470
Page	8	9	14	14	14	14	11	11	12	12	13	13
Basic Accuracy (VDC)	0.06%	0.06%	0.03%	0.02%	0.08%	0.08%	0.09%	0.06%	0.5%	0.3%	0.3%	0.3%
Display Counts	40,000	40,000	50,000/500,000	50,000/500,000	5000	5000	6000	40,000	2000	2000	4000	4000
True RMS	•	•	•	•	•	•	•	•	•	•	•	•
Wireless		RF										
Temperature (Type K)	•	•		•	•	•	•	•	•	•	•	•
Temperature (IR)	•											•
Capacitance	•	•	•	•	•	•	•	•			•	•
Frequency	•	•	•	•	•	•	•	•			•	•
Battery Test												
Duty Cycle	•	•	•	•			•	•			•	•
Autoranging	•	•	•	•	•	•	•	•			•	•
Backlit Display	•	•	•	•	•	•	•	•	•	•	•	•
Relative	•	•	•	•	•	•	•	•			•	•
Min/Max	•	•	•	•	•	•	•	•				
Input Alert									•	•	•	•
Category Rating	CAT IV - 600V	CAT IV - 600V	CAT IV - 600V	CAT IV - 600V	CAT IV - 600V	CAT IV - 600V	CAT IV - 600V	CAT IV - 600V	CAT III - 600V	CAT III - 600V	CAT III - 600V	CAT III - 600V

EX570 CAT IV Industrial MultiMeter + IR Thermometer



Built-in IR Thermometer quickly locates hot spots on electrical panels and HVAC vents without contact.



Built-in IR Thermometer quickly identifies hot spots without contact

- Built-in non-contact IR Thermometer design with laser pointer
- True RMS CAT III-1000V, CAT IV-600V rated with 0.06% basic DCV accuracy
- Diode open circuit voltage of 2.8V DC
- Heavy duty Double molded, water resistant package
- Large backlit 40,000 count LCD with 40-segment bargraph
- Memory for storage and recall of three measurements
- 1000V input protection on all functions
- Type K thermocouple contact temperature measurements
- Features Hold, Relative and Peak Hold, Min, Max and Average recording
- Auto power off with disable feature
- Capacitance, Frequency, Diode and Continuity functions
- 3 year warranty
- Complete with double molded test leads, magnetic hanging strap, general purpose Type K bead wire probe, case, and 9V battery

SPECIFICATIONS

Basic Accuracy	±0.06%
DC/AC Voltage	0.01mV to 1000V
DC/AC Current	0.01µA to 20A
Resistance	0.01Ω to 40MΩ
Capacitance	0.001nF to 10,000µF
Frequency	0.0001Hz to 40MHz
Temperature (Type K)	-50 to 1382°F (-45 to 750°C)
IR Temperature	-22 to 1022°F (-30 to 550°C)
Field of View	30:1 ratio
Duty Cycle	0.01 to 99.99%
Diode (2.8V)/Continuity	Yes
Dimensions/ Weight	7.25x3.25x2.25" (184x83x57mm)/ 12.3oz (349g)

ORDERING

EX570 N	CAT IV Industrial MultiMeter + IR Thermometer
----------------	---



N Indicates products that are available with optional calibration traceable to **NIST**. See page 144 for a complete listing.

EX540/EX542 CAT IV MultiMeter/Dataloggers with Real Time Streaming



CAT IV True RMS MultiMeter datalogs up to 9,999 readings with wireless USB interface capability to transmit readings to your PC in real time

- Real time datalogging or wireless data transmission directly to your PC (30ft/10m)
- True RMS measurements for accurate AC Voltage and Current measurements
- Diode open circuit voltage of 2.8V DC and 1000V input protection on all functions
- Double molded construction for waterproof (IP67) protection
- CAT IV-600V safety rating for industrial applications
- Dual sensitivity frequency functions
- Large backlit triple LCD display with 40,000 counts
- Auto power off with disable feature
- 3 year warranty
- Complete with double molded test leads, magnetic hanging strap, general purpose Type K bead wire temperature probe, remote receiver with USB cable, Windows® compatible software, 9V battery and carrying case

SPECIFICATIONS

Basic Accuracy	±0.06%
DC/AC Voltage	0.01mV to 1000V
DC/AC Current	0.01µA to 20A
Resistance	0.01Ω to 40MΩ
Capacitance	0.001nF to 40mF
Frequency	40Hz to 4kHz (electrical) / 0.001Hz to 100MHz (electronic)
Temperature	-58 to 1382°F (-50 to 750°C)
Duty Cycle	0.1 to 99.90%
Diode (2.8V) / Continuity	Yes
Dimensions/ Weight	7.25x3.25x2.25" (184x83x57mm)/ 12.3oz (349g)

ORDERING

EX540	N	CAT IV MultiMeter/Datalogger with Real Time Streaming (915MHz)
EX542	N	CAT IV MultiMeter/Datalogger with Real Time Streaming (433MHz)

(NOTE: USA, Mexico, and Canada use 915MHz model and majority of other countries use 433MHz model)



Meter features include continuous wireless data streaming to a PC in real time, drop-proof tested to 6.5ft (2m), and waterproof design (IP67).



WIRELESS
Transmitter

Serious about Ruggedness & Versatility

Along with advanced DMM features and True RMS accuracy, the EX500 series' Category IV rating ensures the highest level of protection against sudden transient overvoltage and arcing flash-over. This rugged, waterproof and drop-proof multimeter will take whatever rough handling you dish out. Get Industrial-Duty Protection with Extech's EX500 series.



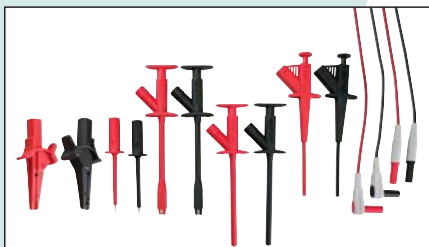
www.extech.com/tough



EX503 CAT IV Heavy Duty Industrial MultiMeter

Average responding multimeter with 0.5% basic accuracy and 4,000 count backlit display

- Waterproof (IP67) rugged double molded design for heavy duty use
- 1000V input protection on all functions
- Dual sensitivity frequency functions
- Data hold, Relative, and 10A max current
- Diode open circuit voltage of 2.8V DC
- Auto power off with disable feature
- CAT IV-600V, CAT III-1000V
- Complete with double molded test leads, magnetic hanging strap, 9V battery, and pouch case



ACCESSORIES (SEE P. 40-43 FOR MULTIMETER ACCESSORIES)

TL841	Test Lead Kit
TL833	Industrial Test Lead Set
TL831	Master Electrical Test Lead Kit
TL810	Electrical Test Lead Kit
TL805	Double Injected Test Leads
TP200	Type K Clamp Probe (212°F/100°C)
HG500	Magnetic Hanging Strap

SPECIFICATIONS

	EX503 N
Averaging/True RMS	Averaging
Basic Accuracy	0.5%
DC Voltage	0.1mV to 1000VDC
AC Voltage	0.1mV to 1000VAC
DC/AC Current	0.1µA to 10A
Resistance	0.1Ω to 40MΩ
Capacitance	0.01nF to 100µF
Frequency (electrical)	5Hz to 1kHz
Frequency (electronic)	0.001Hz to 10MHz
Temperature (Type K)	—
Duty Cycle	0.1 to 99.9%
Diode (2.8V)/Continuity	Yes
UL/CE	Yes
Category Rating	CAT IV-600V, CAT III-1000V
Waterproof / Drop proof	IP67 / 6.5ft (2m)
Dimensions/Weight	7.25x3.25x2.25" (184x83x57mm)/12.3oz (349g)
Warranty	3 years



EX505 CAT IV True RMS Heavy Duty Industrial MultiMeter

True RMS multimeter with 0.5% basic accuracy and 4,000 count backlit display

- Waterproof (IP67) rugged double molded design for heavy duty use
- 1000V input protection on all functions
- Dual sensitivity frequency functions
- Type K Temperature function
- Data hold, Relative, and 10A max current
- Diode open circuit voltage of 2.8V DC
- Auto power off with disable feature
- CAT IV-600V, CAT III-1000V
- Complete with double molded test leads, magnetic hanging strap, general purpose Type K bead wire temperature probe, 9V battery, and pouch case



EX520 CAT IV True RMS Heavy Duty Industrial MultiMeter

True RMS multimeter with 0.09% basic accuracy and 6,000 count backlit display with bargraph

- Waterproof (IP67) rugged double molded design for heavy duty use
- 1000V input protection on all functions
- Dual sensitivity frequency functions
- Type K Temperature function
- Min/Max/Relative/Data Hold, 20A max current
- Diode open circuit voltage of 2.8V DC
- Auto power off with disable feature
- CAT IV-600V, CAT III-1000V
- Complete with double molded test leads, magnetic hanging strap, general purpose Type K bead wire temperature probe, 9V battery, and pouch case



EX530 CAT IV True RMS Heavy Duty Industrial MultiMeter

True RMS multimeter with 0.06% basic accuracy and 40,000 count backlit display with bargraph

- Waterproof (IP67) rugged double molded design for heavy duty use
- 1000V input protection on all functions
- Dual sensitivity frequency functions
- Type K Temperature function
- Min/Max/Relative/Data Hold, 20A max current
- Peak Hold (AC only)
- Data hold, Relative, and 10A max current
- Diode open circuit voltage of 2.8V DC
- Auto power off with disable feature
- CAT IV-600V, CAT III-1000V
- Complete with double molded test leads, magnetic hanging strap, general purpose Type K bead wire temperature probe, 9V battery, and pouch case

EX505 N

True RMS
0.5%
0.1mV to 1000VDC
0.1mV to 1000VAC
0.1µA to 10A
0.1Ω to 40MΩ
0.01nF to 100µF
5Hz to 1kHz
0.001Hz to 10MHz
-4 to 1382°F (-20 to 750°C)
0.1 to 99.9%
Yes
Yes
CAT IV-600V, CAT III-1000V
IP67 / 6.5ft (2m)
7.25x3.25x2.25" (184x83x57mm)/12.3oz (349g)
3 years

EX520 N

True RMS
0.09%
0.1mV to 1000VDC
1mV to 1000VAC
0.1µA to 20A
0.1Ω to 60MΩ
0.01nF to 1000µF
10Hz to 400Hz
0.001Hz to 40MHz
-50 to 1382°F (-45 to 750°C)
0.1 to 99.9%
Yes
Yes
CAT IV-600V, CAT III-1000V
IP67 / 6.5ft (2m)
7.25x3.25x2.25" (184x83x57mm)/12.3oz (349g)
3 years

EX530 N

True RMS
0.06%
0.01mV to 1000VDC
0.01mV to 1000VAC
0.01µA to 20A
0.01Ω to 40MΩ
0.001nF to 40mF
40Hz to 400Hz
0.001Hz to 100MHz
-50 to 1382°F (-45 to 750°C)
0.1 to 99.90%
Yes
Yes
CAT IV-600V, CAT III-1000V
IP67 / 6.5ft (2m)
7.25x3.25x2.25" (184x83x57mm)/12.3oz (349g)
3 years

Big Digits, Big Results.

"I was looking for more reliable test equipment and now use my EX400 for checking voltages, and tracing circuits for shorts and openings. It's a very good product worth giving a try."

Darryl A., Georgia



EX410 Manual Ranging MultiMeter

Basic averaging multimeter with 8 functions

- Large backlit LCD display with easy-to-read 1" digits
- Type K thermometer built-in for temperature measurements
- Low current capability: measure down to 0.1µA
- Input fuse protection and misconnection warnings
- Complete with CAT III test leads, multi-position tilt stand and velcro strap for hanging, protective holster with test lead holder, general purpose Type K bead wire temperature probe, and 9V battery

EX411 True RMS Manual Ranging MultiMeter

Basic True RMS multimeter with 8 functions

- True RMS for accurate readings of non-sinusoidal waveforms
- Large backlit LCD display with easy-to-read 1" digits
- Type K thermometer built-in for temperature measurements
- Low current capability: measure down to 0.1µA
- Input fuse protection and misconnection warnings
- Complete with CAT III test leads, multi-position tilt stand and velcro strap for hanging, protective holster with test lead holder, general purpose Type K bead wire temperature probe, and 9V battery



ACCESSORIES (SEE P. 40-43 FOR MULTIMETER ACCESSORIES)

TL841	Test Lead Kit
TL833	Industrial Test Lead Set
TL831	Master Electrical Test Lead Kit
TL810	Electrical Test Lead Kit
TL803	Standard Test Leads
TP200	Type K Clamp Probe (212°F/100°C)
HG500	Magnetic Hanging Strap



All models UL & CE approved

SPECIFICATIONS	EX410 N	EX411 N
Averaging/True RMS	Averaging	True RMS
Basic Accuracy (VDC)	±0.5%	±0.3%
AC Voltage	1mV to 750V	1mV to 750V
DC Voltage	0.1mV to 1000V	0.1mV to 1000V
AC Current	0.1mA to 20A	0.1mA to 20A
DC Current	0.1µA to 20A	0.1µA to 20A
Resistance	0.1Ω to 20MΩ	0.1Ω to 20MΩ
Capacitance	—	—
Frequency	—	—
Temperature (IR)	—	—
Temperature (Type K)	-4 to 1382°F (-20 to 750°C)	-4 to 1382°F (-20 to 750°C)
Duty Cycle	—	—
Continuity / Diode	Yes	Yes
UL/CE/Category Rating	UL/CE/CAT III-600V, CAT II-1000V	UL/CE/CAT III-600V, CAT II-1000V
Dimensions/Weight	7.4x3.2x2" (187x81x50mm)/0.75lbs (342g)	7.4x3.2x2" (187x81x50mm)/0.75lbs (342g)
Warranty	1 year	1 year



N Indicates products that are available with optional calibration traceable to **NIST**. See page 144 for a complete listing.



EX420 Autoranging MultiMeter

Economical averaging multimeter with 11 functions

- Advanced functions include Capacitance, Frequency, and Type K thermometer
- Large backlit LCD display with easy-to-read 1" digits
- Low current capability: measure down to 0.1µA
- Input fuse protection and misconnection warnings
- Complete with CAT III test leads, multi-position tilt stand and velcro strap for hanging, protective holster with test lead holder, general purpose Type K bead wire temperature probe, and 9V battery



EX430 True RMS Autoranging MultiMeter

Economical True RMS multimeter with 11 functions

- True RMS for accurate readings of non-sinusoidal waveforms
- Advanced functions include Capacitance, Frequency, and Type K thermometer
- Large backlit LCD display with easy-to-read 1" digits
- Low current capability: measure down to 0.1µA
- Input fuse protection and misconnection warnings
- Complete with CAT III test leads, multi-position tilt stand and velcro strap for hanging, protective holster with test lead holder, general purpose Type K bead wire temperature probe, and 9V battery



EX470 True RMS Autoranging MultiMeter + IR Thermometer

Combination multimeter with 12 functions including non-contact Temperature measurement

- Built-in non-contact IR Thermometer design with laser pointer
- Advanced functions include Capacitance, Frequency, Type K thermometer, and Relative
- Large backlit LCD display
- Low current capability: measure down to 0.1µA
- Input fuse protection and misconnection warnings
- Complete with CAT III test leads, multi-position tilt stand and velcro strap for hanging, protective holster with test lead holder, general purpose Type K bead wire temperature probe, and 9V battery

EX420 <small>N</small>	EX430 <small>N</small>	EX470 <small>N</small>	SPECIFICATIONS
Averaging	True RMS	True RMS	Averaging/True RMS
±0.3%	±0.3%	±0.3%	Basic Accuracy (VDC)
0.1mV to 750V	0.1mV to 750V	0.1mV to 750V	AC Voltage
0.1mV to 1000V	0.1mV to 1000V	0.1mV to 1000V	DC Voltage
0.1µA to 20A	0.1µA to 20A	0.1µA to 20A	AC Current
0.1µA to 20A	0.1µA to 20A	0.1µA to 20A	DC Current
0.1Ω to 40MΩ	0.1Ω to 40MΩ	0.1Ω to 40MΩ	Resistance
0.01nF to 100µF	0.01nF to 100µF	0.01nF to 100µF	Capacitance
0.001Hz to 10MHz	0.001Hz to 10MHz	0.001Hz to 10MHz	Frequency
—	—	-58 to 518°F (-50 to 270°C)	Temperature (IR)
-4 to 1382°F (-20 to 750°C)	-4 to 1382°F	-4 to 1382°F (-20 to 750°C)	Temperature (Type K)
0.1% to 99.9%	0.1% to 99.9%	0.1% to 99.9%	Duty Cycle
Yes	Yes	Yes	Continuity / Diode
UL/CE/CAT III-600V, CAT II-1000V	UL/CE/CAT III-600V, CAT II-1000V	UL/CE/CAT III-600V, CAT II-1000V	UL/CE/Category Rating
7.4x3.2x2" (187x81x50mm)/0.75lbs (342g)	7.4x3.2x2" (187x81x50mm)/0.75lbs (342g)	7.4x3.2x2" (187x81x50mm)/0.75lbs (342g)	Dimensions/Weight
1 year	3 years	3 years	Warranty

MP510A/MP530A MultiPro® Series



High performance multimeters with RS-232 PC Interface

- 0.08% basic DCV accuracy
- 5000 count backlit LCD display and Auto power off with disable
- Hold and low resistance auto lead zero
- Optional SW810A PC software and cable sold separately
- 3 year warranty
- Complete with built-in stand, test leads, protective holster, 9V battery, and general purpose Type K bead wire temperature probe for MP530A

Model MP530A Additional Functions

- True RMS AC Voltage & Current and Temperature measurements
- Relative, Min, Max, Max-Min, Peak Hold and Zoom

SPECIFICATIONS	MODEL MP510A	MODEL MP530A
Averaging/True RMS	Averaging	True RMS
DC/AC Voltage	0.01mV to 1000V	0.01mV to 1000V
Basic DCV accuracy	±0.08%rdg	±0.08%rdg
DC/AC Current	0.1µA to 20A	0.1µA to 20A
Resistance	0.01Ω to 50MΩ	0.01Ω to 50MΩ
Capacitance	0.01nF to 9999µF	0.01nF to 9999µF
Frequency	10Hz to 125kHz	10Hz to 125kHz
Temperature	—	-58 to 1832°F (-50 to 1000°C)
AC Bandwidth	40Hz to 20kHz	40Hz to 20kHz
Category rating	CAT IV-600V	CAT IV-600V
Dimensions/Weight	7.32x3.42x1.39" (186x87x35.5mm)/ 0.75lb (340g)	

ORDERING (SEE BELOW FOR OPTIONAL ACCESSORIES UNDER MULTIMASTER SERIES)

MP510A	N	MultiPro® Professional MultiMeter
MP530A	N	MultiPro® True RMS Professional MultiMeter & Temp

MM560A/MM570A MultiMaster® Series



50,000/500,000 count, high accuracy, wide bandwidth True RMS multimeters

- 0.02% (MM570A) and 0.03% (MM560A) basic DCV accuracy
- 50,000 count display with 500,000 counts for DCV and Hz
- True RMS combination AC+DC function
- Highest res. (1µV, 0.01µA, 0.0001Hz, 0.01Ω)
- Auto power off with disable
- 3 year warranty
- Complete with stand, test leads, holster, 9V battery, and general purpose Type K probe for MM570A; Optional SW810A PC software and cable

Model MM570A Additional Functions

- Dual input Type K Thermometer, higher True RMS ACV bandwidth (up to 100kHz) and 1000V input protection on all functions
- 4 to 20mA, displayed as 0 to 100% for process current measurements

SPECIFICATIONS	MODEL MM560A	MODEL MM570A
Display counts	50,000/500,000 count backlit	50,000/500,000 count backlit
Averaging/True RMS	True RMS	True RMS
DC/AC Voltage	0.001mV to 1000V	0.001mV to 1000V
Basic DCV accuracy	±0.03%rdg	±0.02%rdg
DC/AC Current	0.01µA to 20A	0.01µA to 20A
Resistance	0.01Ω to 50MΩ	0.01Ω to 50MΩ
Capacitance	0.01nF to 9999µF	0.01nF to 9999µF
Frequency	5Hz to 200kHz (Line)/5Hz to 2MHz (Logic)	5Hz to 200kHz (Line)/5Hz to 2MHz (Logic)
Temperature	—	-58 to 1832°F (-50 to 1000°C)
AC Bandwidth	20Hz to 20kHz	20Hz to 100kHz
Category rating	CAT IV-600V	CAT IV-600V
Dimensions/Weight	7.32x3.42x1.39" (186x87x35.5mm)/0.75lb (340g)	

ORDERING

MM560A	N	MultiMaster™ Precision MultiMeter
MM570A	N	MultiMaster™ Precision MultiMeter with Temperature

ACCESSORIES (See p. 40-43 for MultiMeter accessories)

SW810A	MultiPro® Software CD & RS-232 Cable
USB100	RS-232 to USB Adaptor
CA899	Vinyl Pouch Carrying Case



N Indicates products that are available with optional calibration traceable to **NIST**. See page 144 for a complete listing.

MG300/MG302 CAT IV Insulation Tester/MultiMeter with Wireless PC Interface



NEW

WIRELESS
Transmitter

CAT IV FC EMI CE



True RMS multimeter gives accurate readings of distorted waveforms



Measure the insulation resistance of transformer windings

Combines a 1000V Insulation Tester with a True RMS MultiMeter

- Wireless USB interface transmits measurement data to a PC
- Backlit large triple display and waterproof (IP67) rugged housing design
- Insulation Resistance from 0.001MΩ to 4000MΩ
- Auto discharge of capacitive voltage
- Lock Power On Function for hands-free operation
- Data Hold and Auto power off
- Min/Max and Relative mode
- 1 year warranty
- Complete with remote receiver with USB cable, Windows® compatible software, heavy duty 4-wire test leads, protective rubber holster, multimeter test leads, carrying case, and 6 x AA batteries
- **NOTE:** USA, Mexico, and Canada use 915MHz model MG300 and majority of other countries use 433MHz model MG302

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Insulation Resistance	4MΩ, 40MΩ, 400MΩ, 4000MΩ	0.001MΩ	±3%
Insulation Test Voltages	125V, 250V, 500V, 1000V		
AC Voltage	1000V	0.1mV	±1%
DC Voltage	1000V	0.01mV	±0.06%
AC Current	10A	0.1μA	±1.5%
DC Current	10A	0.01μA	±1.0%
Resistance	40MΩ	0.01Ω	±0.3%
Capacitance	40mF	0.001nF	±3.5%
Frequency	100MHZ	0.001HZ	±0.1%
Duty Cycle	0.1 to 99.9%	0.01	±1.2%
Temperature	-58 to 2192°F (-50 to 1200°C)	0.1°F (0.1°C)	±1% + 4.5°F (2.5°C)
4-20mA%	-25 to 125%	0.01%	
Continuity/Diode	Yes		
Dimensions/ Weight	7.8 x 3.6 x 1.9" (200 x 92 x 50mm)/ 20.5oz (582g)		

ORDERING

MG300	N	CAT IV Insulation Tester/MultiMeter with Wireless PC Interface (915MHz)
MG302	N	CAT IV Insulation Tester/MultiMeter with Wireless PC Interface (433MHz)

DT300 Laser Distance Meter (164ft/50m)



NEW

CE



Laser measurement accurate to 0.06 inches with Historical Storage that recalls the previous 20 records (measured or calculated results)

- Automatically calculates Area and Volume
- Indirect measurement using Pythagorean theorem
- Continuous measurement function with Min/Max distance tracking updates every 0.5 seconds
- Addition/Subtraction, Front or rear edge reference, Low battery indicator, and Auto power off features
- Double molded housing (IP54)
- 1 year warranty
- Complete with carrying case and 2 AAA batteries

SPECIFICATIONS

Measurement Range	2" to 164' (0.5 to 50m)
Accuracy (up to 32'/10m)	±0.06" (±1.5mm)
Resolution	0.001" (0.001m)
Length Add calculation	99'11" (99.99m)
Area calculation	999.99 sq. ft. (999.99m ²)
Volume calculation	999.99 cu. ft. (999.99m ³)
Laser Power Off / Auto Power Off	After 30 seconds / after 3 minutes
Dimensions/ Weight	4.5 x 1.9 x 1.1" (115 x 48 x 28mm)/ 5.3oz (150g)

ORDERING

DT300	Laser Distance Meter (164ft/50m)
-------	----------------------------------

Compact MultiMeter Selection Guide Pick the right multimeter for your application

Model	EX310	EX320	EX330	EX210	EX230	MN26T	MN25	MN15A	MN16A
Page	16	16	16	17	17	18	18	18	18
Basic Accuracy (VDC)	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Display Counts	2000	2000	4000	2000	4000	4000	2000	2000	4000
Non-Contact Voltage Detector (NCV)	•	•	•						
Temperature (Type K)			•		•	•		•	•
Temperature (IR)				•	•				
Capacitance			•		•	•			•
Frequency			•		•	•			•
Battery Test	•						•	•	
Duty Cycle			•		•	•			•
Autoranging		•	•	•	•	•			•
Backlit Display				•	•				
Relative			•		•	•			•
Min/Max		Max only		Max only					
Category Rating	CAT III- 600V	CAT III- 600V	CAT III- 600V	CAT III- 600V	CAT III- 600V	CAT II-600V	CAT II-600V	CAT III- 600V	CAT III- 600V

EX300 Series Mini Digital MultiMeters + Voltage Detector



Integrated Non-contact Voltage Detector for quickly checking the presence of live wires before testing.

Combination MultiMeter with non-contact AC Voltage Detector

- Built-in non-contact AC Voltage Detector with red LED indicator and audible beeper
- Large 1" digits makes display easy to read
- Dimensions: 5.7x2.9x1.6" (147x76x42mm); Weight: 9oz (260g)
- 1 year warranty
- Complete with stand, test leads, protective holster, batteries, general purpose Type K bead wire temperature probe (EX330 only)

Model EX310 (Manual Ranging)

- Battery test 1.5V and 9V

Model EX320 (Autoranging)

- Max Hold, Data Hold, and Auto Power Off

Model EX330 (Autoranging)

- Data Hold and Auto Power Off
- Advanced functions include Type K Temperature, Capacitance, and Frequency

SPECIFICATIONS	EX310	EX320	EX330
Display Counts	2000 counts	2000 counts	4000 counts
Basic Accuracy	0.50%	0.50%	0.50%
NCV Detector	100 to 600VAC	100 to 600VAC	100 to 600VAC
DC Voltage	0.1mV to 600V	0.1mV to 600V	0.1mV to 600V
AC Voltage	0.1V to 600V	0.1mV to 600V	0.1mV to 600V
DC/AC Current	0.1mA to 10A	0.1µA to 10A	0.1µA to 10A
Resistance	0.1Ω to 2000kΩ	0.1Ω to 20MΩ	0.1Ω to 40MΩ
Capacitance	—	—	0.001nF to 200µF
Frequency	—	—	0.001Hz to 10MHz
Temperature	—	—	-4 to 1382°F (-20 to 750°C)
Duty Cycle	—	—	0.1 to 99.9%
Diode/Continuity	Yes	Yes	Yes
Category Rating	CAT III-600V, CAT II-1000V	CAT III-600V, CAT II-1000V	CAT III-600V, CAT II-1000V

ORDERING

EX310	N	Manual Ranging 9 Function Mini MultiMeter + Non-Contact Voltage Detector
EX320	N	Autoranging 8 Function Mini MultiMeter + Non-Contact Voltage Detector
EX330	N	Autoranging 12 Function Mini MultiMeter + Non-Contact Voltage Detector
409996		Vinyl pouch carrying case
TP873		Replacement Bead wire Temperature Probe (-22 to 572°F/-30 to 300°C)
TL803		Replacement Test Leads



EX200 Series Mini Digital MultiMeters + IR Thermometer



Built-in IR Thermometer quickly identifies overheating motors or locate hot spots on electrical panels and HVAC vents without contact

- Large backlit dual LCD with easy-to read digits
- Low current capability
- Input fuse protection
- Auto power off and Data Hold
- 1 year warranty
- Complete with test leads, general purpose bead wire temperature probe (Model EX230), and 9V battery

Model EX210

- 2000 counts
- 4:1 Distance to Target Ratio
- Max Hold

Model EX230

- 4000 counts
- 6:1 Distance to Target Ratio
- Advanced functions include Type K Temperature, Capacitance, Frequency, and Duty Cycle
- Relative Mode

SPECIFICATIONS	EX210	EX230
Display Counts	2000	4000
Basic Accuracy (VDC)	±0.5%	±0.5%
AC/DC Voltage	0.1mV to 600V	0.1mV to 600V
AC/DC Current	0.1µA to 10A	0.1µA to 10A
Resistance	0.1Ω to 20MΩ	0.1Ω to 40MΩ
Capacitance	—	0.01nF to 100µF
Frequency	—	0.001Hz to 10MHz
Temperature (IR)	-5 to 446°F (-20 to 230°C)	-5 to 446°F (-20 to 230°C)
Temperature (Type K)	—	-4 to 1400°F (-20 to 760°C)
Duty Cycle	—	0.1% to 99.9%
Continuity / Diode	Yes	Yes
Dimensions	5.8x2.9x1.6" (147x76x42mm)	5.8x2.9x1.6" (147x76x42mm)
Weight	9.17oz (260g)	9.17oz (260g)

ORDERING

EX210	N	Autoranging MultiMeter + IR Thermometer
EX230	N	Autoranging MultiMeter + IR Thermometer
409996		Vinyl pouch carrying case
TP873		Replacement Bead wire Temperature Probe (-22 to 572°F/-30 to 300°C)
TL803		Replacement Test Leads



Extech-exclusive Meters with Built-in IR Thermometer!

Our innovative design incorporates a built-in IR Thermometer to our select meters. Look for the Built-in IR Thermometer logo throughout this catalog.



MultiMeters Voltage Detectors Clamp Meters Psychrometers Humidity Meters Moisture Meters Tachometers Air Flow Meters

MN15A/MN16A Digital Mini MultiMeters



Troubleshoot electronic and electrical equipment

Compact Autoranging or Manual ranging multimeters with Temperature

- Large easy to read digital display
- 1 year warranty
- Complete with battery, Type K bead wire probe and test leads

MN15A (Manual Ranging)

- 1.5V and 9V Battery tests under load

MN16A (Autoranging)

- Advanced functions include AC Current, Capacitance, Frequency, and Duty Cycle
- Auto power off with disable feature

SPECIFICATIONS	MN15A	MN15A Basic Accuracy	MN16A	MN16A Basic Accuracy
DC Voltage	600V (0.1mV)	±0.5%	600V (1mV)	±1.2%
AC Voltage	600V (0.1V)	±1.2%	600V (0.1mV)	±1.5%
DC Current	10A (0.1mA)	±1.2%	10A (0.1µA)	±1.5%
AC Current	—	—	10A (0.1µA)	±1.8%
Resistance	20MΩ (0.1Ω)	±0.8%	40MΩ (0.1Ω)	±1.2%
Capacitance	—	—	100µF (0.01nF)	±3.0%
Frequency	—	—	5MHz (0.001Hz)	±1.2%
Temperature	-4 to 1400°F (-20 to 750°C)	±(3%rdg+9°F/5°C)	-4 to 1400°F (-20 to 750°C)	±(3%rdg+9°F/5°C)
Duty Cycle	—	—	0.1 to 99.9%	±1.2%
Battery Test	9V & 1.5V Batteries	—	—	—
Category rating	CAT III-600V	—	CAT III-600V	—
Dimensions/Weight	5.43x2.83x1.5" (138x72x38mm)/ 5.4oz (153g)			

ORDERING

MN15A	Manual Ranging MiniTec® MultiMeter with Temperature
MN16A	Autoranging MiniTec® MultiMeter with Temperature
TP873	Spare Type K Bead Wire Probe (-22 to 572°F/-30 to 300°C)

MN25/MN26T MiniTec® Digital MultiMeters



Displays AC Voltage of an outlet receptacle

Rugged CAT II-600V pocket multimeters with 8 to 11 Functions

- Overload protection and indication
- 1 year warranty
- 1.5V and 9V Battery tests under load and 10A fuse protection
- Includes protective holster with stand, 9V battery and test leads

MN25 (Manual Ranging/ 8 Functions)

- Relative zero, Data Hold, Range Hold, Auto power off
- Includes holster with stand, Type K bead wire probe, AAA batteries, and test leads

SPECIFICATIONS	MN25	MN25 Basic Accuracy	MN26T	MN26T Basic Accuracy
Display Count	2000 count	—	4000 count	—
DC Voltage	600V (0.1mV)	±0.5%	600V (0.1mV)	±1.0%
AC Voltage	600V (0.1V)	±1.5%	600V (0.1mV)	±1.5%
DC/AC Current	10A (1µA)	±1.2% DC/±1.8% AC	10A (0.1µA)	±1.5% DC/±1.8% AC
Resistance	2MΩ (0.1Ω)	±0.8%	40MΩ (0.1Ω)	±1.2%
Capacitance	—	—	200µF (0.001nF)	±3.5%
Frequency	—	—	10MHz (0.001Hz)	±1.5%
Temperature	—	—	0 to 1400°F (1°) 0 to 760°C (1°)	±3.0%
Duty Cycle	—	—	0.1% to 99.9% (0.1%)	±1.2%
Diode/Continuity	Yes	—	Yes	—
Dimensions/Weight	4.8x2.4x1.6" (122x61x40mm)/ 9.17oz (260g)			

ORDERING

MN25	Manual Ranging MiniTec® Digital MultiMeter
MN26T	Autoranging MiniTec® Digital MultiMeter
TP873	Spare Type K Bead Wire Temperature Probe (-22 to 572°F/-30 to 300°C)
409992	Vinyl pouch carrying case

DM220 CAT IV Pocket MultiMeter + NCV



Autoranging DMM with 4000 count LCD display, NCV and Built-in Flashlight

- Non-Contact Voltage detection identifies live circuits
- Rugged double molded housing; CAT IV-600V, CAT III-1000V safety rating
- Complete with test leads and two AAA batteries; 1 year warranty

SPECIFICATIONS	RANGE	MAX RESOLUTION	BASIC ACCURACY (%RDG)
DC/AC Voltage	600V	0.1mVDC/1mVAC	±0.5%DC/±1.2% AC
DC/AC Current	200mA	0.1µA	±2.0%DC/±2.5%AC
NC Voltage	100 to 600VAC		
Resistance	40MΩ	0.1Ω	±0.8%
Frequency	10kHz	0.001Hz	±2.0%
Capacitance	200µF	0.001nF	±5.0%
Duty Cycle	0.5 to 99%	0.5%	±(2.0% reading + 5 digits)
Diode/Continuity	Yes		
Dimensions/Weight	4.72x2.2x1.6" (120x55x540mm) / 5.12oz (145g)		

ORDERING

DM220	CAT IV Pocket MultiMeter + NCV
409992	Vinyl pouch case

DM110 Mini Pocket MultiMeter



10 function Autoranging including Frequency, Capacitance, and Duty Cycle

- Large 4000 count LCD display
- Auto power off with disable feature
- Relative and Data Hold functions
- Built-in storage compartment for integrated test leads
- CAT II - 600V safety rating; Over-range and low battery indication
- Includes test leads, protective holster, button battery, and case; 1 year warranty

SPECIFICATIONS	RANGE	MAX RESOLUTION	BASIC ACCURACY (%RDG)
AC/DC Voltage	500V	1mV	AC: ±2.3%; DC: ±1.3%
AC/DC Current	400mA	0.01mA	AC: ±2.5%; DC: ±2.0%
Resistance	400 to 40MΩ	0.1Ω	±2.0%
Capacitance	100µF	0.001nF	±3.0%
Frequency	5Hz to 10MHz	0.001Hz	±2%
Duty Cycle	0.1% to 99.9%	0.1%	±1.2%
Diode/Continuity	Yes		
Dimensions/Weight	4.25 x 2.2 x 0.5" (108 x 56 x 11.5mm)/ 1.7oz (50g)		

ORDERING

DM110	Mini Pocket MultiMeter
-------	------------------------

381676 Pen DMM with Non-Contact Voltage Detector



Built-in Non-Contact Voltage Detector

Autoranging multimeter with non-contact voltage detection

- Large 2000 count LCD display
- Data Hold, Range Hold, and Maximum Hold features
- Meets IEC1010-1; CAT III-600V; Auto power off, overload and low battery indication
- Includes test lead with alligator clips, AAA batteries, and case; 1 year warranty

SPECIFICATIONS

Function	Range	Max Resolution	Basic Accuracy (%rdg)
Non-contact Voltage	50 to 600VAC		
AC/DC Voltage	200mV, 2, 20, 200, 600V	0.1mV	AC: ±0.8%; DC: 0.7%
Resistance (Ω)	200, 2k, 20k, 200k, 2M, 20M	0.1Ω	±0.8%
Diode/Continuity	Yes		
Dimensions/Weight	8.2x1.5x1.1" (208x38x29mm)/ 3.9oz (110g)		

ORDERING

381676	Pen DMM with Non-Contact Voltage Detector
--------	---

TK430 Electrical Test Kit



Meets plant maintenance, HVAC or electrical technician's needs

- Assembled to provide all the electrical testing needs for installation and repair of electrical systems, HVAC equipment and large appliances
- Kit contains an EX430 True RMS autoranging digital multimeter, MA200 400A clamp meter, 40130 Non-Contact voltage detector plus test leads and temperature probe
- Supplied in a soft carrying case that provides protection and organization for the meters and accessories
- Dimensions: 9.5x6.8x2.8" (241x173x71mm); Weight: 2.6lbs (1.2kg)

Model EX430: Autoranging True RMS MultiMeter with 11 functions including Capacitance, Frequency and Temperature. (see p. 13)

Model MA200: 400A Clamp Meter with basic AC Current and 1mA resolution. (see p. 31)

Model 40130: Non-Contact Voltage Detector detects AC Voltage from 100VAC to 600VAC without touching the source. (see p. 38)

ORDERING

TK430	Electrical Test Kit
480172	AC Line Splitter

TK430-IR Industrial Troubleshooting Kit with IR



Meets plant maintenance, HVAC or electrical technician's needs

- Assembled to provide all the electrical testing needs for installation and repair of electrical systems, HVAC equipment and large appliances
- Non-contact InfraRed thermometer allows for quick surface temperature measurement
- Kit contains an EX430 True RMS autoranging digital multimeter, MA200 400A clamp meter, 42510 Mini IR Thermometer, 40130 Non-Contact voltage detector plus test leads and temperature probe
- Supplied in a heavy duty hard carrying case that provides protection and organization for the meters and accessories
- Dimensions: 14.5x11x4.5" (368x280x114mm); Weight: 4.5lbs (2kg)

Model EX430: Autoranging True RMS MultiMeter with 11 functions including Capacitance, Frequency and Temperature. (see p. 13)

Model MA200: 400A Clamp Meter with basic AC Current and 1mA resolution. (see p. 31)

Model 42510: Wide range mini IR Thermometer measures -58 to 1000°F (-50 to 538°C). Built-in laser identifies target area; 8:1 distance to target ratio

ORDERING

TK430-IR	Electrical Test Kit with IR
----------	-----------------------------

EX505-K Heavy Duty Industrial MultiMeter Kit



CAT IV MultiMeter and AC Voltage Detector With 8 piece test lead kit

- Kit includes EX505 True RMS waterproof (IP67)/drop-proof MultiMeter, DV25 Dual Range Non-contact AC Voltage Detector + Flashlight, TL808 8-piece Professional Test Lead Kit, plus professional double-molded test leads, Type K thermocouple bead probe with banana input adaptor, and magnetic hanging strap
- Supplied in a soft carrying case that provides protection and organization for the meters and accessories
- Dimensions: 9.8x8x2" (248x203x51mm); Weight: 1.2lbs (544g)

Model EX505: Industrial grade, CAT IV-600V, 4000 count display, waterproof (IP67), CE/UL listed, drop-proof, rugged multimeter with True RMS functions (see p. 11)

Model DV25: Dual Range Non-contact voltage detector (24 to 1000VAC/100 to 1000VAC) + Flashlight with Audible/ Visual indication, and double-molded housing CAT IV-1000V, CE/UL (see p. 38)

Model TL808: 8-Piece Professional Test Lead Kit with CAT III-1000V rating

ORDERING

EX505-K	Heavy Duty Industrial MultiMeter Kit
---------	--------------------------------------

MA620-K Industrial DMM/Clamp Meter Test Kit



CAT IV MultiMeter and True RMS Clamp Meter with integrated AC Voltage Detector

- Kit contains EX505 rugged, waterproof multimeter with 11 functions, MA620 600A True RMS AC Clamp-on MultiMeter with built-in non-contact AC Voltage Detector, test leads and Type K thermocouple bead probe with banana input adaptor, and magnetic hanging strap
- Supplied in a soft carrying case that provides protection and organization for the meters and accessories
- Dimensions: 9.8x8x2" (248x203x54mm); Weight: 1.5lbs (680g)

Model EX505: Industrial grade, CAT IV-600V, 4000 count display, waterproof (IP67), CE/UL listed, drop-proof, rugged multimeter with True RMS functions (see p. 11)

Model MA620: 600A True RMS 6000 count AC Clamp-on MultiMeter with built-in non-contact AC Voltage Detector, test leads and temperature probe; CE/ETL approved (see p. 29)

ORDERING

MA620-K	Industrial DMM/Clamp Meter Test Kit
---------	-------------------------------------

MA640-K Phase Rotation/Clamp Meter Test Kit



Ideal kit for plant maintenance — True RMS Clamp Meter with multimeter functions, 3-phase rotation tester, and CAT IV AC Voltage Detector

- **MA640:** 600A True RMS 6000 count AC/DC Clamp-on MultiMeter with built-in non-contact AC Voltage Detector (see p. 29 for specifications)
- **480400:** 3-Phase Rotation Tester with multi-line LCD display, durable double-molded housing, and easy-to-open wide-jaw alligator clips (see p. 36 for specifications)
- **DV25:** Dual Range AC Voltage Detector (24 to 1000VAC/100 to 1000VAC) + Flashlight with Audible/ Visual indication, double-molded housing, and CAT IV-1000V safety rating (see p. 38 for specifications)
- Set of double molded professional test leads
- Type K thermocouple bead probe and Type K to Banana Input Adaptor
- Supplied in a heavy duty carrying case that provides protection and organization for the meters whenever they are needed
- Dimensions: 9.8x8x2" (248x203x54mm); Weight: 1.3lbs (590g)

ORDERING

MA640-K	Phase Rotation/Clamp Meter Test Kit
---------	-------------------------------------

Extech Kits Offer Added Value!

Extech special value kits are available to meet your budget and application needs! See p. 90-91 for Environmental and Restoration kits and p.135 for Water Quality Test Kits.



Environmental Kit



Restoration Kit



Home Inspector Kit



Water Restoration Kit



Water Quality Test Kit

Clamp Meter Selection Guide

Compare specifications of our most popular Clamp Meters

	EX820	EX830	EX840	EX720	EX730	EX622	EX623	MA620	MA640	MA200	MA220	MA250	380942	380941	380947
Page	23	23	23	27	27	25	25	29	29	31	31	28	32	33	33
AC Current	1000A	1000A	1000A	800A	800A	400A	400A	600A	600A	400A	400A	200A	30A	200A	400A
Counts	4000	4000	4000	4000	4000	4000	4000	6000	6000	2000	4000	4000		4000	
True RMS	•	•	•	•	•	•	•	•	•				•		•
Jaw Opening	1.7"	1.7"	1.7"	1.2"	1.2"	1.25"	1.25"	1.5"	1.5"	0.9"	0.9"	1.2"	0.9"	0.9"	0.9"
Basic Accuracy	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%	±1.5%	±1.5%	±2.8%	±2.8%	±2.5%	±3.0%	±2.5%	±1.5%	±1.0%	±1.5%
DC Current		•	•	•	•		•		•		•		•	•	•
AC/DC Voltage	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•		•	
Capacitance	•	•	•	•	•	•	•	•	•	•	•	•			
Frequency	•	•	•	•	•	•	•	•	•	•	•	•		•	•
Temperature (Type K)	•	•	•	•	•	2x	2x	•	•		•	•			
IR Temperature	•	•	•			•	•								
Diode	•	•	•	•	•	•	•	•	•	•	•	•			
Continuity	•	•	•	•	•	•	•	•	•	•	•	•		•	
Auto Power Off	•	•	•	•	•	•	•	•	•	•	•	•		•	
Backlit Display	•	•	•	•	•	•	•	•	•						
Min/Max	•	•	•			•	•	•	•	Max		•	•	•	•
Zero		•	•		•		•		•		•		•	•	•
Data Hold	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Peak	•	•	•	•	•	•	•								
CAT Rating	CAT III 600V	CAT III 600V	CAT IV 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 300V	CAT III 300V	CAT III 300V



The Extech EX800 series clamp meters work as hard as you. The EX800s are designed for safety and ruggedness, without compromising performance or innovation. Only Extech offers available CAT IV-rated, 1000A AC/DC capabilities, True RMS accuracy and a built-in infrared thermometer for hot-spot detection. Plus, the EX845's MeterLink™ technology can wirelessly transmit your readings to a FLIR infrared camera via Bluetooth.

SPECIFICATIONS

- True RMS
- Display counts
- Jaw size/Cable size
- AC Current (Max Res.)
- DC Current (Max Res.)
- Basic ACA Accuracy (% rdg)
- AC/DC Voltage (Max Res.)
- Resistance (Max Res.)
- Capacitance (Max Res.)
- Frequency (Max Res.)
- Temperature (Type K)
- Temperature (IR)
- Diode (2.8V)/ Continuity
- Wireless Communication
- UL, ETL, CE, Category Rating
- Dimensions/Weight
- Warranty

ACCESSORIES (SEE P. 40-43 FOR TEST LEAD ACCESSORIES)

- TP873 Replacement Bead wire Temperature probe (-22 to 572°F/-30 to 300°C)
- TL841 Test Lead Kit
- TL833 Industrial Test Lead Kit
- TL831 Master Test Lead Kit
- TL803 Standard Test Leads

1000 Amp Clamp Meters with Built-in IR Thermometer



EX820 1000A True RMS AC Clamp Meter + IR Thermometer

True RMS AC clamp-on multimeter gives you accurate readings of non-sinusoidal waveforms

- True RMS AC Voltage and Current measurements provide accurate readings regardless of waveforms
- Built-in non-contact IR Thermometer design with laser pointer for locating hot spots
- Diode open circuit voltage of 2.8V DC
- Peak hold captures inrush currents and transients
- Data Hold, Min/Max, and Auto Power off
- Complete with test leads, 9V battery, general purpose Type K probe, and case



EX830 1000A True RMS AC/DC Clamp Meter + IR Thermometer

True RMS AC clamp-on multimeter and DC Current function

- DC Current function to 1000A
- True RMS AC Voltage and Current measurements provide accurate readings regardless of waveforms
- Built-in non-contact IR Thermometer design with laser pointer for locating hot spots
- Diode open circuit voltage of 2.8V DC
- Peak hold captures inrush currents and transients
- Data Hold, Min/Max, and Auto Power off
- Complete with test leads, 9V battery, general purpose Type K probe, and case



NEW METERLINK Bluetooth



Communicates with FLIR Thermal Imagers



EX840/EX845 CAT IV 1000A True RMS AC/DC Clamp Meters + IR Thermometer

CAT IV 600V approval rating assures maximum safety and functionality

- AC/DC Voltage measurement to 1000V and AC/DC Current to 1000A
- True RMS AC Voltage and Current measurements
- Built-in non-contact IR Thermometer design with laser pointer
- Diode open circuit voltage of 2.8V DC
- Peak Hold, Data Hold, Min/Max, and Auto Power off
- Includes CAT IV test leads, 9V battery, Professional test lead set, general purpose Type K probe, and case
- **Model EX845** - Bluetooth® Transmitter with METERLINK™ wirelessly transmits Voltage and Current readings to your FLIR camera to incorporate meter readings with thermal images

EX820 N

Yes
4000 count backlit LCD
1.7" (43mm); 750MCM
1000A (0.1A)
—
±2.5% (AC)
600V (0.1mV)
40MΩ (0.1Ω)
40mF (0.001nF)
4kHz (1Hz)
-4 to 1400°F (-20 to 760°C)
-58 to 518°F (-50 to 270°C)
Yes
—
UL, CE, CAT III-600V
10.6x4.3x2" (270x110x50mm)/ 13.6oz (386g)
1 year

EX830 N

Yes
4000 count backlit LCD
1.7" (43mm); 750MCM
1000A (0.1A)
1000A (0.1A)
±2.5% (AC); ±2.5% (DC)
600V (0.1mV)
40MΩ (0.1Ω)
40mF (0.001nF)
4kHz (1Hz)
-4 to 1400°F (-20 to 760°C)
-58 to 518°F (-50 to 270°C)
Yes
—
UL, CE, CAT III-600V
10.6x4.3x2" (270x110x50mm)/ 13.6oz (386g)
1 year

■ EX840 N | ▲ EX845

Yes
4000 count backlit LCD
1.7" (43mm); 750MCM
1000A (0.1A)
1000A (0.1A)
±2.5% (AC); ±2.5% (DC)
1000V (0.1mV)
40MΩ (0.1Ω)
40mF (0.001nF)
4kHz (1Hz)
-4 to 1400°F (-20 to 760°C)
-58 to 518°F (-50 to 270°C)
Yes
—
■ No ▲ BlueTooth and METERLINK
ETL, CE, CAT IV-600V; CAT III-1000V
10.6x4.3x2" (270x110x50mm)/ 13.6oz (386g)
3 years

Get More Done With a 5-in-1

“The EX623 gave me what I needed to effectively perform my daily requirements with a single device. I use it for installation and maintenance of VFDs plus other machinery and upgrades. The IR thermometer, along with the dual K thermocouples, allows me to compare pertinent data for troubleshooting: electrical hot spots and differential temperatures in HVAC. It’s rugged with lots of features at a great price.”

Jenn L., Ontario, Canada



TL831



TP200

TP400



480172



ACCESSORIES (SEE P. 40-43 FOR DETAILS)

TP200	Type K Pipe Clamp Probe (212°F/100°C)
TP400	Type K Pipe Clamp Probe (212°F/100°C)
TL841	Test Lead Kit
TL833	Industrial Test Lead Kit
TL831	Master Test Lead Kit
480172	AC Line Splitter (see p. 26)

Beyond Clamp Meters

The Extech EX600 series 400A Clamp Meters go beyond basic clamp-on functions. The available built-in IR thermometer is perfect for quick and safe non-contact temperature measurements. The unique tip on the clamp is designed with an integrated non-contact voltage detector to safely check the presence of live wires. These specialized HVAC clamp meters with μA feature also function as advanced multimeters measuring voltage, resistance, capacitance, frequency, and contact temperature with the ability to calculate delta-T.

SPECIFICATIONS

True RMS
Jaw size/Cable size
AC/DC Current
Max resolution
Basic ACA accuracy
AC/DC Voltage (Max Res.)
DC μA Current
Resistance (Max Res.)
Capacitance (Max Res.)
Frequency (Max Res.)
Temperature (Type K-dual input)
Temperature (IR)
Diode (2.8V)/ Continuity
Duty Cycle
ETL, CE, Category Rating
Dimensions/Weight
Warranty



EX613 AC/DC True RMS 400A Clamp Meter

Dual thermocouple inputs for differential temperature measurement plus Non-contact Voltage Detector

- Dual type K thermocouple input with Differential Temperature function (T1, T2, T1-T2)
- Built-in non-contact Voltage detector
- DC μA multimeter function for HVAC flame rod Current measurements
- Data Hold plus fast Peak Hold of current surges during motor startup
- Measures motor capacitors to 40,000 μF
- Auto power off with audible alert and disable function
- Autoranging with manual override
- Complete with CAT III-600V, double molded test leads, 9V battery, two general purpose Type K bead wire probes, and carrying case



EX622 AC True RMS 400A Clamp Meter + IR Thermometer

Built-in IR Thermometer and dual thermocouple inputs for differential temperature measurement plus non-contact Voltage Detector

- Built-in non-contact IR Thermometer with laser pointer; 8:1 distance to target ratio
- Dual type K thermocouple input with Differential Temperature function (T1, T2, T1-T2)
- Built-in non-contact Voltage detector
- DC μA multimeter function for HVAC flame rod Current measurements
- Data Hold plus fast Peak Hold of current surges during motor startup
- Measures motor capacitors to 40,000 μF
- Auto power off with audible alert and disable function
- Autoranging with manual override
- Complete with CAT III-600V, double molded test leads, 9V battery, two general purpose Type K bead wire probes, and carrying case



EX623 AC/DC True RMS 400A Clamp Meter + IR Thermometer

Built-in IR Thermometer, AC/DC function, dual thermocouple inputs and Non-contact Voltage Detector

- DC Current with Zero function
- Built-in non-contact IR Thermometer with laser pointer; 8:1 distance to target ratio
- Dual type K thermocouple input with Differential Temperature function (T1, T2, T1-T2)
- Built-in non-contact Voltage detector
- DC μA multimeter function for HVAC flame rod Current measurements
- Data Hold plus fast Peak Hold of current surges during motor startup
- Measures motor capacitors to 40,000 μF
- Auto power off with audible alert and disable function
- Autoranging with manual override
- Complete with CAT III-600V, double molded test leads, 9V battery, two general purpose Type K bead wire probes, and carrying case

EX613 N

Yes
1.25" (32mm); 500MCM
400.0A AC/DC
10mA
$\pm 1.5\%$
600V (0.1mV)/600V (0.01mV)
4000 μA (0.01 μA)
40.000M Ω (0.01 Ω)
40mF (0.01nF)
40MHz (0.001Hz)
-58 to 1832°F (-50 to 1000°C)
—
Yes
0.5 to 99.0%
ETL, CE, CAT III-600V
9x3.1x1.9" (229x80x49mm)/ 10.7oz (303g)
1 year

EX622 N

Yes
1.25" (32mm); 500MCM
400.0A AC only
10mA
$\pm 1.5\%$
600V (0.1mV)/600V (0.01mV)
4000 μA (0.01 μA)
40.000M Ω (0.01 Ω)
40mF (0.01nF)
40MHz (0.001Hz)
-58 to 1832°F (-50 to 1000°C)
-58 to 518°F (-50 to 270°C)
Yes
0.5 to 99.0%
ETL, CE, CAT III-600V
9x3.1x1.9" (229x80x49mm)/ 10.7oz (303g)
1 year

EX623 N

Yes
1.25" (32mm); 500MCM
400.0A AC/DC
10mA
$\pm 1.5\%$
600V (0.1mV)/600V (0.01mV)
4000 μA (0.01 μA)
40.000M Ω (0.01 Ω)
40mF (0.01nF)
40MHz (0.001Hz)
-58 to 1832°F (-50 to 1000°C)
-58 to 518°F (-50 to 270°C)
Yes
0.5 to 99.0%
ETL, CE, CAT III-600V
9x3.1x1.9" (229x80x49mm)/ 10.7oz (303g)
1 year

Tough Clamps for Tough Jobs

The Extech EX700 series of clamp meters offers users a mix of versatile measurement capabilities coupled with a durable design. The EX700s feature available True RMS accuracy and an 800A AC/DC current rating. For diagnostics, the EX700 captures inrush currents and transients with fast peak hold. And for temperature extremes, the available thermocouple thermometer measures up to 1400°F (760°C). Discover the rugged, advanced and ergonomic EX700 series for yourself.



TP200

TP400

See page 41 for ordering.



ACCESSORIES (SEE P. 40-43 FOR DETAILS)

480172	AC Line Splitter (see below for details)
TP873	Replacement Bead wire Temperature probe (-22 to 572°F/-30 to 300°C)
TL803	Replacement Test Leads
TL841	Test Lead Kit
TL833	Industrial Test Lead Kit
TL831	Master Test Lead Kit



Take Easy AC Current Measurements without Separating the Conductors!

Buy an AC Current 480172 AC Line Splitter

- Enables users of a clamp meter to measure AC current on a 2-wire or 3-wire power cord to 15A
- Fits clamp jaw size 0.75" (19mm) and above
- Provides easy and safe measurements of current without the need to separate the conductors
- Plugging the power connector into the Line Splitter separates the hot/live conductor from the neutral (and ground)
- Also features voltage check function
- Dimensions: 5.25x2x1" (133x51x25mm), Weight: 5.8oz (164.4g)

SPECIFICATIONS

True RMS
Display counts
Jaw size/Cable size
AC Current
DC Current
Max resolution
Basic ACA Accuracy (% rdg)
AC/DC Voltage (Max Res.)
Resistance (Max Res.)
Capacitance (Max Res.)
Frequency (Max Res.)
Temperature (Type K)
UL, CE, Category Rating
Dimensions/Weight
Warranty



EX710 800A AC Clamp Meter

Ergonomically designed in rugged double molded housing

- Data Hold and Auto power off
- Peak Hold for inrush currents
- AC/DC Voltage, Resistance, Capacitance, and Frequency
- Complete with test leads, 9V battery, and belt holster



EX720 800A True RMS AC Clamp Meter with Type K Temperature

True RMS clamp meter with Type K surface Temperature measurements

- True RMS measurements
- Type K thermocouple temperature function
- Data Hold and Auto power off
- Peak Hold for inrush currents
- AC/DC Voltage, Resistance, Capacitance, and Frequency
- Complete with test leads, 9V battery, general purpose Type K bead wire probe, and belt holster



EX730 800A True RMS AC/DC Clamp Meter with Type K Temperature

True RMS AC/DC Current clamp meter with Type K surface Temperature measurements

- DC Current with Zero function
- True RMS measurements
- Type K thermocouple temperature function
- Data Hold and Auto power off
- Peak Hold for inrush currents
- AC/DC Voltage, Resistance, Capacitance, and Frequency
- Complete with test leads, 9V battery, general purpose Type K bead wire probe, and belt holster

EX710 N

—
4000 count backlit LCD
1.2" (30mm); 500MCM
40.00A, 400.0A, 800A
—
0.01A (AC)
±2.8%
600V (0.1mV)
40MΩ (0.1Ω)
40mF (0.001nF)
4kHz (1Hz)
—
UL, CE, CAT III-600V
9x3.1x1.9" (229x80x49mm) / 10.7oz (303g)
1 year

EX720 N

Yes
4000 count backlit LCD
1.2" (30mm); 500MCM
40.00A, 400.0A, 800A
—
0.01A (AC)
±2.5%
600V (0.1mV)
40MΩ (0.1Ω)
40mF (0.001nF)
4kHz (1Hz)
-4 to 1400°F / -20 to 760°C
UL, CE, CAT III-600V
9x3.1x1.9" (229x80x49mm) / 10.7oz (303g)
1 year

EX730 N

Yes
4000 count backlit LCD
1.2" (30mm); 500MCM
40.00A, 400.0A, 800A
40.00A, 400.0A, 800A
0.01A AC/DC
±2.8% (AC); ±2.5% (DC)
600V (0.1mV)
40MΩ (0.1Ω)
40mF (0.001nF)
4kHz (1Hz)
-4 to 1400°F / -20 to 760°C
UL, CE, CAT III-600V
9x3.1x1.9" (229x80x49mm) / 10.7oz (303g)
1 year

Ask Someone Who Owns One

"I was interested in the multiple features of the MA640 and the reliability of the Extech DMM as stated by a couple of my peers. The Extech color scheme also caught my eye. I use it for electrical measurement and troubleshooting. The Extech DMM measures up with any DMM that I have used and the price is very competitive."

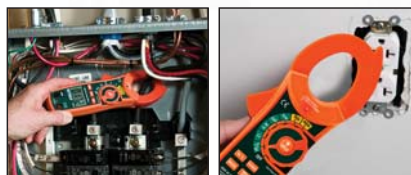
Wayne H.
South Dakota



MA250 200A AC Clamp Meter + NCV

20A and 200A Current ranges plus built-in non-contact Voltage detector with LED alert

- 1.2" (30mm) jaw size for conductors up to 350MCM
- Relative Mode for Capacitance Zero, and Offset Adjustment
- Data Hold and MIN/MAX
- Auto Power Off
- Complete with test leads, general purpose Type K bead wire probe, two AAA batteries, and carrying case



SPECIFICATIONS

MA250 **N**

True RMS	—
Display counts	4000 count LCD
Jaw size/Cable size	1.2" (30mm); 350MCM
AC Current	20A, 200A
DC Current	—
Max Resolution	0.01A (AC)
Basic ACA Accuracy (% rdg)	±2.5%
AC Voltage (Max Res.)	600V (0.1mV)
DC Voltage (Max Res.)	600V (0.1mV)
Resistance (Max Res.)	40.00MΩ (0.1Ω)
Capacitance (Max Res.)	100μF (0.01nF)
Frequency (Max Res.)	10kHz (1Hz)
Temperature	-4 to 1400°F (-20 to 760°C)
Duty Cycle	0.1 to 99.9%
Diode/Continuity	Yes
Data Hold	Yes
Min/Max	Min/Max
UL, ETL, CE, Category Rating	ETL, CE, CAT III-600V
Dimensions/Weight	7.9x2.6x1.5" (200x66x37mm)/ 7.2oz (205g)
Warranty	1 year

ACCESSORIES (SEE P. 40-43)

480172	AC Line Splitter (see p. 26)
TP873	Replacement Bead wire Temperature probe (-22 to 572°F/-30 to 300°C)
TL803	Replacement Test Leads



MA410 400A AC Clamp Meter + NCV

40A and 400A Current ranges plus built-in non-contact Voltage detector with LED alert

- 1.2" (30mm) jaw size for conductors up to 350MCM
- Relative Mode for Capacitance Zero, and Offset Adjustment
- Data Hold and MIN/MAX
- Auto Power Off
- Complete with test leads, general purpose Type K bead wire probe, two AAA batteries, and carrying case



MA620 True RMS 600A AC Clamp Meter + NCV

60A and 600A Current ranges and True RMS for accurate readings of non-sinusoidal waveforms

- 1.5" (40mm) jaw size for conductors up to 500MCM
- Backlit LCD with bargraph
- Relative Mode for Capacitance Zero and Offset Adjustment
- Data Hold, MIN/MAX, and Auto Power Off
- Complete with test leads, general purpose Type K bead wire probe, 9V battery and carrying case



MA640 True RMS 600A AC/DC Clamp Meter + NCV

60A and 600A Current ranges and True RMS for accurate readings of non-sinusoidal waveforms

- DC Current function
- 1.5" (40mm) jaw size for conductors up to 500MCM
- Backlit LCD with bargraph
- Relative Mode for Capacitance Zero and Offset Adjustment
- Data Hold, MIN/MAX, and Auto Power Off
- Complete with test leads, general purpose Type K bead wire probe, 9V battery and carrying case

MA410 N	MA620 N	MA640 N
—	Yes	Yes
4000 count LCD	6000 count LCD (backlit)	6000 count LCD (backlit)
1.2" (30mm); 350MCM	1.5" (40mm); 500MCM	1.5" (40mm); 500MCM
40A, 400A	60A, 600A	60A, 600A
—	—	60A, 600A
0.01A (AC)	0.01A	0.01A
±2.5%	2.8%	2.8%
600V (0.1mV)	600V (1mV)	600V (1mV)
600V (0.1mV)	600V (1mV)	600V (1mV)
40.00MΩ (0.1Ω)	60MΩ (0.1Ω)	60MΩ (0.1Ω)
100μF (0.01nF)	4000.0μF (0.01nF)	4000.0μF (0.01nF)
10kHz (1Hz)	10kHz (0.001Hz)	10kHz (0.001Hz)
-4 to 1400°F (-20 to 760°C)	-4 to 1400°F (-20 to 760°C)	-4 to 1400°F (-20 to 760°C)
0.1 to 99.0%	0.1 to 99.9%	0.1 to 99.9%
Yes	Yes	Yes
Yes	Yes	Yes
Min/Max	Min/Max	Min/Max
ETL, CE, CAT III-600V	ETL, CE, CAT III-600V	ETL, CE, CAT III-600V
7.9x2.6x1.5" (200x66x37mm)/ 7.2oz (205g)	9.1x3x1.5" (232x77x39mm)/ 9.6oz (271g)	9.1x3x1.5" (232x77x39mm)/ 9.6oz (271g)
1 year	1 year	1 year

The Choice for Technical Education

“My son used these meters (MA200) in college and I was impressed when I got a chance to use one. If it was good enough for the college to teach their students, it must be a quality product. I haven’t been disappointed.”

Dave H., Minnesota



ACCESSORIES (SEE P. 40-43)

480172	AC Line Splitter (see p. 26)
TP873	Replacement Bead wire Temperature probe (-22 to 572°F/-30 to 300°C)
TL803	Replacement Test Leads



MA120 200A AC/DC Mini Clamp Meter+ Voltage Detector

Clamp meter with built-in AC Voltage detector + flashlight

- Functions include AC/DC Current and Frequency
- Data Hold
- Zero Function
- Backlit LCD
- Non-contact AC Voltage (NCV) detector via clamp tip
- Built-in white LED flashlight
- Auto power off
- Complete with pouch case and two AAA batteries



MA150 200A AC Mini Clamp Meters+ Voltage Detector

Clamp meters with built-in AC Voltage detector + flashlight

- Functions include AC Current, AC/DC Voltage, and Resistance
- MAX Hold
- Backlit LCD
- Non-contact AC Voltage (NCV) detector via clamp tip
- Built-in white LED flashlight
- Auto power off
- Complete with pouch case and two AAA batteries

SPECIFICATIONS	MA120 N	MA150 N
True RMS	—	—
Display counts	2000 count backlit LCD	2000 count backlit LCD
Jaw size/Cable size	0.7" (18mm); 300MCM	0.7" (18mm); 300MCM
AC Current	200A	200A
DC Current	200A	—
Max Resolution	0.1A	0.1A
Basic ACA Accuracy (% rdg)	±3%	±3%
AC Voltage (Max Res.)	NCV	NCV, 600V (0.1mV)
DC Voltage (Max Res.)	—	600V (0.1mV)
Resistance (Max Res.)	—	20MΩ (0.1Ω)
Capacitance (Max Res.)	—	—
Frequency (Max Res.)	1kHz (0.01Hz)	—
Temperature	—	—
Duty Cycle	—	—
Diode/Continuity	—	Yes
Data Hold	Yes	—
Min/Max	—	Max
UL, ETL, CE, Category Rating	CE, CAT III-300V	CE, CAT III-300V
Dimensions/Weight	6.5x2.6x1.3" (164x65x32mm) /6.2oz (176g)	6.5x2.6x1.3" (164x65x32mm) /6.2oz (176g)
Warranty	1 year	1 year



AM300 300A AC Analog Clamp Meter

**Rotary Scale with Pointer
Lock freezes the reading on
the display**

- Single function/range switch for easy one hand operation
- Jaw opens to 1.5" (38mm)
- AC/DC Voltage and Resistance measurement
- Pointer Lock function freezes the reading
- Zero adjust
- Complete with test leads, 1.5V AA battery and carrying case



MA200 400A AC Clamp Meter

**Basic AC Current Meter
with 6 functions**

- AC Current measurement
- Compact size allows measurements in tight locations
- Auto power off
- Complete with test leads, case and two AAA batteries



MA220 400A AC/DC Clamp Meter

**AC/DC clamp meter
with 11 functions**

- AC/DC Current measurement
- Capacitance, Frequency, Temperature and Duty Cycle
- One touch "Auto Zero"
- Compact size allows measurements in tight locations
- Auto power off
- Complete with test leads, case, two AAA batteries and a general purpose Type K bead wire probe

AM300 <small>N</small>	MA200 <small>N</small>	MA220 <small>N</small>	SPECIFICATIONS
—	—	—	True RMS
Analog	2000 count LCD	4000 count LCD	Display counts
1.5" (38mm) 500MCM	0.9" (23mm); 300MCM	0.9" (23mm); 300MCM	Jaw size/ Cable size
6,15, 60, 150, 300A (AC scale)	2.000A, 20.00A, 200.0, 400A	2.000A, 20.00A, 200.0, 400A	AC Current
—	—	2.000A, 20.00A, 200.0, 400A	DC Current
—	0.001A AC	0.01A AC/DC	Max. Resolution
±3.0%FS	±2.5%	±3%	Basic ACA Accuracy (% rdg)
300V, 600V	600V (0.1mV)	600V (0.1mV)	AC Voltage (Max Res.)
75V	600V (0.1mV)	600V (0.1mV)	DC Voltage (Max Res.)
2kΩ	20MΩ (0.1Ω)	40MΩ (0.1Ω)	Resistance (Max Res.)
—	—	100μF (0.01nF)	Capacitance (Max Res.)
50 to 400Hz (ACA)	—	150kHz (0.001Hz)	Frequency (Max Res.)
—	—	-58 to 1832°F (-50 to 1000°C)	Temperature
—	—	0.5% to 99.0%	Diode/Continuity
—	Yes	Yes	Data Hold
Pointer Lock	Yes	Yes	Min/Max/Peak
—	Max	—	Category Rating
CE, CAT II-600V	UL, CE, CAT III-600V	UL, CE, CAT III-600V	Dimensions
9x2.8x1.5" (230x72x37mm)/14.5oz (416g)	7.9x2x1.4" (200x50x35mm)/7oz (200g)	7.9x2x1.4" (200x50x35mm)/7oz (200g)	Weight
1 year	1 year	1 year	Warranty

Small Size, Big Performance

“The Extech mini-clamp was perfect for reaching tight spaces due to the narrower design and thinner clamps. And where the Fluke only offered four functions, Extech offered six.”

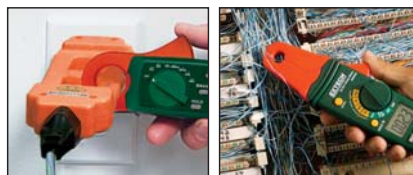
Ilya K., United States Marine Corps,
North Carolina



380942 30A AC/DC True RMS Mini Clamp Meter with 0.1mA Resolution

Highest resolution and
accuracy at low currents

- Low AC/DC Current measurements with high resolution to 0.1mA AC and 1mA DC
- Fast 40 segment bargraph
- One touch Auto Zero for DC Current measurements
- Auto power off with disable feature
- Data Hold
- Complete with test leads, wrist strap, 2 AA batteries and case



ACCESSORIES (SEE P. 40-43 FOR TEST LEADS)

480172 AC Line Splitter (see p. 26)

SPECIFICATIONS	380942 N
True RMS	True RMS
Display counts	4000 count LCD
Jaw size/Cable size	0.9" (23mm); 4/0 AWG
AC Current	400mA, 4A, 30A
DC Current	4A, 30A
Max Resolution	AC: 0.1mA, DC: 0.001A
Basic ACA Accuracy (% rdg)	±1.5%
AC Voltage (Max Res.)	400V (0.1V)
DC Voltage (Max Res.)	400V (1V)
Resistance (Max Res.)	—
Frequency (Max Res.)	—
Diode/Continuity	—
Data Hold	Yes
Min/Max/Peak	Min/Max
UL, CE, Category Rating	UL, CE, CAT III-300V
Dimensions	7x1.8x1.3" (178x45x32mm)
Weight	8oz (225g)
Warranty	1 year



380950 80A AC/DC Mini Clamp Meter

Small jaw size (0.5"/12mm) fits into tight spaces

- 1mA resolution
- Voltage, Resistance, Frequency and Duty Cycle measurement
- Auto power off
- CAT III-600V
- Complete with test leads, carrying case and two 1.5V AAA batteries



380941 200A AC/DC Mini Clamp Meter

High resolution mini clamp with Voltage, Frequency, and Resistance

- High resolution to 10mA AC/DC
- Fast 40 segment bargraph
- One touch Auto Zero for DC Current measurements
- Complete with test leads, wrist strap, 2 AA batteries and carrying case



380947 400A AC/DC True RMS Mini Clamp Meter

True RMS mini-clamp with high 1mA AC current resolution

- Non-contact Frequency measurements to 10kHz through the clamp jaws
- Fast 40 segment bargraph
- One touch Auto Zero
- Complete with wrist strap, 2 AA batteries and carrying case

380950	380941 <small>N</small>	380947 <small>N</small>
—	—	True RMS
4000 count LCD	4000 count LCD	4000 count LCD
0.5" (12mm); 3/0 AWG	0.9" (23mm); 4/0 AWG	0.9" (23mm); 4/0 AWG
4.000A, 80.0A	40A, 200A	4A, 40A
4A, 80A	40A, 200A	40A, 400A
1mA	0.01A AC/DC	AC: 0.001A, DC: 0.01A
±2.5%	±1.0%	AC: ±1.5%, DC: ±1.0%
600V (0.1mV)	400V (0.1V)	—
600V (0.1mV)	400V (0.1V)	—
40MΩ (0.1Ω)	400Ω (0.1Ω)	—
10MHz (0.001Hz)	10kHz (0.01Hz)	10kHz (0.01Hz)
Continuity	Continuity	—
Yes	Yes	Yes
Max	Min/Max	Min/Max
CE, CAT III-600V	UL, CE, CAT III-300V	UL, CE, CAT III-300V
8.2x2.7x1.4" (210x70x37mm)	7x1.75x1.25" (178x45x32mm)	7x1.8x1.3" (178x45x32mm)
7oz (200g)	8oz (225g)	8oz (225g)
1 year	1 year	1 year

Powerful Tools for High Current Jobs

For the most demanding applications, Extech's high-current clamp meters provide trustworthy measurements up to 3000A. Find the right high-current clamp for your job. Extech offers AC and AC/DC options, power quality measurements, True RMS accuracy, voltage to 1000V, flexible clamps for hard-to-reach wires, inrush measurements, and more.



MA1500 CAT IV 1500A AC/DC True RMS Clamp Meter + NCV

Integrated Non-Contact Voltage Detector to quickly check for the presence of live wires before testing

- True RMS for accurate readings of non-sinusoidal waveforms
- Includes Multimeter functions
- Inrush function captures transients during motor startups
- Relative Mode for Capacitance Zero and Offset Adjustment
- Data Hold, Peak Hold, MIN/MAX, and Auto Power Off
- Complete with test leads, general purpose Type K bead wire temperature probe, 9V battery and carrying case



More Power Clamps

See Extech's complete line of power clamps on pages 60-61



ACCESSORIES (SEE P. 40-43 FOR TEST LEADS)

480172 AC Line Splitter (see p. 26)

SPECIFICATIONS

SPECIFICATIONS	MA1500 N
True RMS	Yes
Display counts	40,000/4000 count dual backlit LCD
Jaw size/Cable size	2.0" (52mm); 500MCM
AC Current	1500A
DC Current	1500A
Max resolution	0.01A
Basic ACA Accuracy (% rdg)	±2.8%
AC Voltage (Max Res.)	750V (0.01mV)
DC Voltage (Max Res.)	1000V (0.01mV)
Resistance (Max Res.)	40MΩ (0.01Ω)
Capacitance (Max Res.)	40mF (0.01nF)
Frequency (Max Res.)	40MHz (0.001Hz)
Temperature	-148 to 1832°F (-100 to 1000°C)
Diode/Continuity	Yes
Data Hold	Yes
Min/Max/Peak	Yes
Category Rating	CAT IV-600V
UL/CE	CE
Dimensions/ Weight	11.57x4.13x1.85" (294x105x47mm)/ 18.9oz (536g)
Warranty	1 year



380926 CAT IV 2000A AC/DC Clamp Meter

Full range MultiMeter functions with high resolution to 0.1μA/0.1mV and CAT IV-600V Safety Rating

- AC/DC Current via clamp with 0.1A resolution
- Large 2" jaw size fits 750MCM conductor size
- Data Hold
- Push button Zero adjust improves DC accuracy
- Complete with built-in stand, test leads and 9V battery



382400 3000A AC Flexible Clamp Meter

Flexible probe easily wraps around bus bars and cable bundles

- AC Voltage to 600V
- Fast Peak capture (30μs)
- Selectable frequency (50/60Hz)
- Max/Min
- Simultaneously displays Frequency with Current or Voltage
- Auto power off with disable feature
- Complete with 24" (61cm) flexible current probe, carrying case, and 2 AA batteries



Includes CAT IV Test Lead Kit

380976-K 1-Phase and 3-Phase 1000A AC Power Clamp Meter

Functions include Power, Current, High Resistance, and Type K Temperature

- True Power, Apparent Power and Reactive Power, plus Horsepower, Power factor, and Phase Angle with Lead/Lag indicator (see p. 60 for details)
- AC+DC μA Current with 10nA resolution for flame rod tests
- Auto power off with disable
- Test Lead Kit includes: two CAT IV-600V 72" (1.8m) lead extensions with right angle and straight end shrouded banana plugs; two modular test probe handles with stainless steel tips; two plunger activated retractable jaw clips; two extra large alligator clips
- Complete with test lead kit, general purpose Type K bead wire probe, case, and 9V battery

380926 **N**

Yes
5000 count Backlit LCD
2" (50mm); 750MCM
400.0A, 2000A (Clamp); 400mA (DMM)
400.0A, 2000A (Clamp); 400mA (DMM)
0.1A (Clamp); 0.1μA (DMM)
±2%
1000V (1mV)
1000V (0.1mV)
40MΩ (0.1Ω)
50μF (10pF)
100kHz (0.001Hz)
—
Yes
Yes
—
CAT IV-600V
CE
10x2.9x1.5" (255x73x38mm)/ 14oz (380g)
1 year

382400 **N**

Yes
4000 count LCD
Flexible
300.0A, 1000.0A, 3000A
—
0.1A
±1%
600V (0.1V)
—
—
—
45 to 65Hz (0.1Hz)
—
—
Yes
Yes
Yes
CAT III-600V
CE
5.1x3.1x1.7" (130x80x43mm)/ 15oz (430g)
1 year

380976-K **N**

Yes
9999 count LCD
1.6" (40mm); 500MCM
100.0A, 1000.0A
—
0.010A (Clamp); 0.01μA (DMM)
±2% (Clamp), ±1% (DMM)
600V (0.1mV)
600V (0.1mV)
100MΩ (0.1Ω)
7000μF (1nF)
1kHz (0.1Hz)
-58 to 1000°F (-50 to 900°C)
Yes
Yes
Min/Max
CAT III-600V
UL/CE
9x3x1.6" (228x76x39mm)/ 16.4oz (465g)
1 year

PRT200 Non-Contact Phase Rotation Tester



Checks phase sequence and phase status and tests up to 1000VAC with LED and audible indication

- Fully insulated non-contact alligator clips with wide jaws
- 75 to 1000VAC input voltage with 45 to 65Hz frequency range
- LEDs indicate phase orientation (clockwise or counter-clockwise) and whether each phase is live
- Durable housing with mounting magnets
- Adjustable LED brightness switch for making measurements in dimly lit areas or sunlight
- Low battery warning
- Auto power off to save battery life when not in use
- CAT IV-600V safety rating
- Dimensions: 4.7 x 2.7 x 1.5" (118 x 69 x 38mm); Weight: 13oz (370g)
- 1 year warranty
- Complete with three built-in 30" (76cm) test leads with large color-coded alligator clips, four AA batteries, and pouch case

ORDERING

PRT200	Non-Contact Phase Sequence Tester
--------	-----------------------------------

480400/480403 Motor Rotation and 3-Phase Testers



Check 3-phase sequence and motor rotation

- Tests phase orientation of 3-Phase power sources
- Indicates phase orientation (clockwise or counter-clockwise) and whether each of the 3-Phases is live
- Easy to open alligator clips with wide jaws
- Durable double molded housing
- 1 year warranty
- Complete with cable and 3 large color-coded alligator clips, case, and 9V battery (for 480403)

480400 3-Phase Tester

- Multi-line LCD Displays; No battery required

480403 Motor Rotation and 3-Phase Tester

- LEDs display motor rotation and phase status
- Indicates rotation direction of motor
- Determine rotation of a motor without contact

SPECIFICATIONS	MODEL 480400	MODEL 480403
Phase Sequence	Yes	Yes
Voltage	40 to 600V	40 to 600V
Frequency	15 to 400Hz	2 to 400Hz
Motor Rotation	—	Yes
CE/Category Rating	CE, CAT III-600V	
Dimensions	5.1x2.7x1.25" (130x69x32mm)/ 4.5oz (130g)	

ORDERING

480400	3-Phase Rotation Tester
480403	Motor Rotation and 3-Phase Tester



Special Value Kit

See p. 21 for details

DL150 True RMS AC Voltage/Current Datalogger



Supplied with a protective hard case



Datalog up to 16,350 readings with user programmable sample rate from 1 second to 24 hours

- Measure True RMS AC Voltage (600V) or Current (200A)
- Readings can be downloaded to your PC via the USB interface and analyzed using the included software or exported to a spreadsheet
- High/Low user-programmable alarms
- LCD indicates time/date, current readings, Min/Max, and whether alarm settings have been exceeded
- Normal, Peak and Capture (user-specified trigger level) recording modes
- Auto Power off and battery check
- 1 year warranty
- Complete with current clamp, test leads, alligator clips, USB cable, Windows® compatible software, universal AC adaptor, and 3.6V Lithium battery

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
AC Current	10 to 200A	0.1A	±(2% rdg ± 1A)
AC Voltage	10 to 600V	0.1V	±(1.5% rdg ± 1V)
Memory	16,350 points		
Sampling Rate	1 second to 24 hours		
PC Interface	USB includes software		
Dimensions	4.5 x 2.5 x 1.3" (114 x 63 x 34mm)		
Weight	8.7oz (248g)		

ORDERING

DL150	True RMS AC Voltage/Current Datalogger
-------	--

DL160 Dual Input True RMS AC Voltage/Current Datalogger



Supplied with a protective hard case



Datalog up to 256,000 readings with user programmable sample rate from 1 second to 24 hours

- Measures simultaneously:
 - Two True RMS AC Voltage inputs or
 - Two AC Current inputs or
 - One AC Voltage and one AC Current input
- Readings can be downloaded to your PC via the USB interface and analyzed using the included software or exported to a spreadsheet
- High/Low user-programmable alarms
- LCD indicates time/date, current readings, Min/Max, and whether alarm settings have been exceeded
- Auto Power off and battery check
- 1 year warranty
- Complete with two Current sensor modules, two Voltage sensor modules, two sets of test leads, two sets of alligator clips, USB cable, Windows® compatible software, universal AC Adaptor, 4 AAA batteries and two 2032 button batteries

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
AC Current	10 to 200A	0.1A	±(2% rdg ± 1A)
AC Voltage	10 to 600V	0.1V	±(2% rdg ± 1V)
Memory	256,000 points		
Sampling Rate	1 second to 24 hours		
PC Interface	USB includes software		
Dimensions	4.5 x 2.5 x 1.3" (114 x 63 x 34mm)		
Weight	8.7oz (248g)		

ORDERING

DL160	Dual Input True RMS AC Voltage/Current Datalogger
-------	---

40130 AC Voltage Detector with On/Off Audible Beeper Button



Non-contact detection of AC Voltage up to 600VAC

- Detects AC Voltage from 100V to 600V
- For use on 50/60Hz circuits
- Tip fits into outlets or against wire insulation
- Flashing red LED light and push button ON/OFF Audible beeper indicator
- Locate breaks in power cables
- CAT III-600V
- Dimensions: 6x0.75x1" (152x19x25mm)
Weight: 2oz (57g)
- 1 year warranty
- Complete with pocket clip and two AAA batteries

ORDERING

40130 AC Voltage Detector

DV20/DV24 AC Voltage Detectors with Flashlight and CAT IV Option



Rugged double molded housing

- Suitable for outlets or against wire insulation testing
- For use on 50/60Hz circuits
- Built-in bright flashlight
- Dimensions: 6.25x1" (159x25mm)
Weight: 1.5oz (42g)
- 1 year warranty
- Complete with pocket clip and two AAA batteries
- **Model DV20** - CAT III-600V; 100V to 600V AC Voltage
- **Model DV24** - CAT IV-1000V; 50V to 1000V AC Voltage

ORDERING

DV20 AC Volt Detector with Flashlight
DV24 CAT IV AC Volt Detector with Flashlight

DV25 Dual Range AC Voltage Detector with Flashlight



Two selectable ranges for low and high non-contact AC Voltage detection

- 2 ranges: 24 to 1000VAC and 100 to 1000VAC
- CAT IV-1000V safety rating
- Suitable for outlets or against wire insulation testing
- For use on 50/60Hz circuits
- Audible and Visual voltage indication
- Built-in bright flashlight with On/Off button
- Dimensions: 6.25 x 1" (159 x 25mm)
Weight: 1.48oz (42g)
- 1 year warranty
- Complete with pocket clip and two AAA batteries

ORDERING

DV25 Dual Range AC Volt Detector

DV30 Adjustable AC Voltage Detector with Sensitivity Adjustment



Non-contact detection of AC Voltage down to 12VAC

- Detects AC Voltage from 12V to 600V
- Audible and visible voltage indication
- Sensitivity adjustment increases or reduces sensor trigger threshold
- Self test function
- CAT III-600V
- Dimensions: 6.1x1.1x1" (155x28x25mm)
Weight: 1.5oz (42g)
- 1 year warranty
- Complete with pocket clip and four LR44 button batteries

ORDERING

DV30 Adjustable AC Voltage Detector

DA30 Non-Contact Current Detector with Sensitivity Adjustment



Locates current in hidden wires and cables up to 1000A

- Detects AC Current (200mA to 1000A) through shielded wires, conduit, and metal circuit breaker or junction boxes
- Audible and visible indication
- Sensitivity adjustment increases or reduces sensor trigger threshold
- CAT III-600V
- Dimensions: 5.7x1.1x1" (145x28x25mm)
Weight: 1.6oz (45g)
- 1 year warranty
- Complete with pocket clip and four LR44 button batteries

ORDERING

DA30 Non-Contact Current Detector

DVA30 Combination Non-Contact AC Voltage and Current Detector



Detects and pinpoints wide range Voltage and Current with Sensitivity Adjustment

- The only two-in-one AC Current (200mA to 1000A) and AC Voltage (12V to 600V) detector designed for electrical testing
- Loud audible and bright visible current and voltage detect indicators
- Sensitivity adjustment increases or reduces sensor trigger threshold
- CAT III-600V
- Dimensions: 7.6x1.2x0.9" (192x31x24mm)
Weight: 2.1oz (60g)
- 1 year warranty
- Complete with pocket clip and four LR44 button batteries

ORDERING

DVA30 Non-Contact Volt/Current Detector

DV40 AC Voltage Detector + IR Thermometer



Non-contact Voltage Detection



Non-contact InfraRed Temperature measurement

Non-contact Voltage detector that measures non-contact temperature

- Detects AC Voltage from 50V to 1000V
- Tip fits into outlets or against wire insulation
- Low battery indicator and Auto power off feature
- CAT III-1000V
- Built-in InfraRed Thermometer function
 - Range: -20 to 445°F (-30 to 230°C)
 - Resolution: 0.1°
 - Field of View: 1:1
 - Emissivity: Fixed 0.95
- Dimensions: 6.25x1" (159x25mm);
- Weight: 1.48oz (42g)
- 1 year warranty
- Complete with pocket clip and three LR44 batteries

ORDERING

DV40	AC Voltage Detector with IR Thermometer
------	---

VT10/VT30 Multi-function Voltage Testers



Voltage, Continuity and Phase Testers with Flashlight;

- LED indication of AC/DC voltage:
- DC Polarity LED indication; Continuity beeper; Low impedance; Double molded housing
- Phase rotation test for motors
- IEC1010-1 CAT IV 600V and CAT III 1000V safety rating
- Dimensions: 9.4x3x1.6" (240x78x40mm);
- Weight: 8.4oz (237g)
- 1 year warranty
- Complete with 2 AAA batteries, protective cap, and pouch case

VT10

- AC Voltage: 24, 48, 120, 208, 240, 277, 480, 600
- DC Voltage: 6, 12, 24, 36, 48, 110, 220, 400

VT30

- Digital bargraph
- Large LCD display
- AC Voltage (0 to 480V) and DC Voltage (0 to 690V)

ORDERING

VT10	Multifunction Voltage Tester
VT30	Digital Voltage Tester with bargraph



Multifunction Voltage Testers measure Voltage in outlets and conduct a 3-Phase sequence test. Features include a built-in flashlight.

TL810 Electrical Test Lead Kit



Double Insulated with CAT III-1000V Rating for your protection

- Two 40" (1m) PVC lead extensions (1000V rating) with shrouded banana plugs on both ends
- Two very sharp, extra long 0.3" (7mm) stainless steel tipped plug-on test probes
- Two stainless steel flat tip test probes (0.6"/15mm long)
- Two plunger activated retractable jaw clips with a wide 0.75" (19mm) jaw opening

ORDERING

TL810 Electrical Test Lead Kit

TL809 Electronic Test Lead Kit



Ideal for testing digital circuitry

- Two 42" (1m) PVC lead extensions with shrouded banana plugs at both ends. CAT III-1000V rating, UL listed
- Two modular 4" (102mm) Heavy Duty test probe handles with 0.16" (4mm) banana plug tip, CAT III-1000V, UL listed
- Two plunger mini-hooks
- Two alligator clips with removable insulators
- Includes 3 compartment sealable nylon pouch to organize/protect your test leads

ORDERING

TL809 Electronic Test Lead Kit

TL806/7 Alligator Clips for Test Lead Tips



Add convenience to your test leads

- TL806 — Extra large, double insulated, CAT III-1000V clips mate with banana plug patch cords. Jaw opens to 0.8" (20mm) with sharp teeth for piercing insulated wire. IEC1010 compliant. Optional accessory to TL810 or TL809
- TL807 — Alligator clips with insulated rubber boot fit onto test leads, CAT III-1000V. Compatible with TL805 (bottom left). TL807C fits TL803 leads

ORDERING

TL806 Extra Large Alligator Clips for TL810 or TL809

TL807 Insulated Alligator Clips for TL805

TL807C Insulated Alligator Clips for TL803

TL805 Double Injected Test Leads



Non-slip comfort grip

- Professional grade test leads. Double coated PVC lead wire with white inner layer. Heavy duty chromium plated brass tips. Shrouded, non-twist banana plugs for reduced socket wear. "Superflex" molded strain reliefs for improved cable flexibility. "D" shaped finger guards. Compatible with most multimeters. 10A capacity. CAT IV-600V, CAT III-1000V rating. UL listed
- Optional accessory — Insulated Alligator Clip (TL807), shown above

ORDERING

TL805 Double Injected Test Leads

TL803 Standard Test Leads



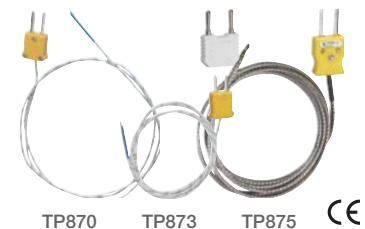
Protective tip covers for safe storage

- Standard replacement test leads. Shrouded banana connectors, molded strain reliefs. Compatible with most multimeters. 10A capacity. CAT III-1000V rating. UL listed.
- Optional accessory — Insulated Alligator Clip (TL807C) shown above

ORDERING

TL803 Standard Test Leads

TP870/3/5 Type K Temperature Probes



Bead wire temperature probes for use with multimeters featuring Type K temperature functions

ORDERING

TP870 Bead wire with Type K connector (-40 to 482°F/-40 to 250°C)

TP873 Bead wire with Type K connector and with banana adaptor (-22 to 572°F/-30 to 300°C); CE approved

TP875 High Temperature bead wire probe with Type K connector and banana adaptor; -58 to 1000°F (-50 to 538°C); CE approved

**CA200 200A AC
Clamp-on Adaptor**



**AC Current measurements,
no battery required**

- 0.62" (16mm) clamp jaw
- 1mV AC output per Amp
- ±2% basic accuracy
- CAT II-600V, CAT III-300V
- Dims: 4.3x1.9x1.3" (111x50x33mm)
Weight: 4.5 oz (129g)
- Complete with built-in 5.3ft (163cm) cable with banana plugs; one year warranty

ORDERING

CA200 200A AC Clamp Adaptor

**CA250 400A AC/DC
Clamp-on Adaptor + NCV**



Built-in non-contact AC voltage detector

- 1.2" (30mm) clamp jaw
- Measures AC/DC Current in two ranges:
0 to 40A (10mV per Amp output) and
0 to 400A (1mV per Amp output)
- ±2.5% basic accuracy; CAT III-600V;
- DC zero adjust
- Optional CA250-NIST available
- Dims: 5.8x2.3x1.3" (146x60x32mm)
Weight: 8oz (226g)
- Complete with built-in 3.8ft (1.1m) cable with banana plugs and two AAA batteries; one year warranty

ORDERING

CA250 400A AC/DC Clamp Adaptor + NCV

**TP400 High Temperature
Type K Pipe Clamp Probe**



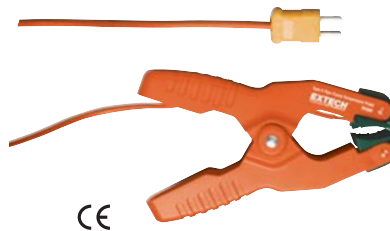
**Hands-free temperature measurement
to 450°F without the use of tape or
Velcro®**

- Spring-loaded jaw for secure grip on pipes from 0.25" (6.35mm) to 1.5" (38mm) diameter
- For use with any Thermometer or MultiMeter with a Type K input
- Measurement range: -4 to 450°F (-20 to 232°C)
- Basic accuracy: ±3.6°F (1.8°C)
- Complete with attached 36" (0.9m) cable and Type K connector

ORDERING

TP400 Type K High Temperature Pipe Clamp Probe

**TP200 Type K Pipe Clamp
Temperature Probe**



**Hands-free superheat/sub-cooling
temperature measurement without the
use of tape or Velcro®**

- Spring-loaded jaw for secure grip on pipes; 0.25" (6.35mm) to 1.5" (38mm) diameter
- For use with any Thermometer or MultiMeter with a Type K input
- Measurement range: -4 to 200°F (-20 to 93°C)
- Basic accuracy of ±5%FS
- Complete with attached 36" (0.9m) cable and Type K connector

ORDERING

TP200 Type K Temperature Pipe Clamp Probe

Protective Soft Cases



409992



409996



409997



CA500



CA899



CA900

ORDERING

- 409992 Small carrying case 6.25x4.5x1" (159x114x25mm)
- 409996 Medium carrying case 7.8x5.3x1.6" (197x133x41mm)
- 409997 Large carrying case 9.5x7x2" (243x178x51mm)
- CA500 Case w/shoulder strap, side pockets 7.4x3.5x2.5" (188x89x64mm)
- CA899 Large case with shoulder strap 10x5x3" (254x127x76mm)
- CA900 Wide carrying case for DMM Kits 9.8x8x2" (248x203x51mm)

TL841 Professional Test Lead Kit



16-piece kit with multiple test lead tip configuration

- Test Lead Set with Straight Probes, CAT III-1000V, 16A
- Alligator Clip Set, 5A, CAT III-300V
- TL743 Slim Reach Test Probe Set
- Spade Lugs, 0.16" (4mm) opening, 30VAC/60VDC, 5A
- Test Leads, Right Angle and Straight End, CAT III-1000V, 16A
- Test Leads with Hook Tip, Pincer Tip, and Couplers
- Conveniently stored in a pouch case

ORDERING

TL841 Professional Test Lead Kit

TL833 Industrial Test Lead Kit



11-piece kit with CAT III-1000V rating

- TL726 Double Molded Silicone Test Leads
- TL740 Industrial Plunger Style Test Clips
- TL741 Heavy Duty Plunger Style Hook Clip Set
- TL708 Large Alligator Clip Set
- TL743 Slim Reach Test Probe Set
- Type K Bead Probe with Banana Adaptor
- Conveniently stored in a pouch case

ORDERING

TL833 Industrial Test Lead Kit

TL831 Master Electrical Test Lead Kit



12-piece kit industrial grade test leads

- TL726 Double Molded Silicone Test Leads
- TL747 Electronic Sharp Test Probe Set
- TL741 Heavy Duty Plunger Style Hook Clip Set
- TL742 Heavy Duty Plunger Style Pincer Grip Set
- TL740 Industrial Plunger Style Test Clips
- TL709 Medium Alligator Clip Set
- Conveniently stored in a pouch case

ORDERING

TL831 Master Electrical Test Lead Kit

TL741 Heavy Duty Plunger Style Hook Clips



Spring loaded clip ideal for gripping component lead or wire

- 1000V, 10A
- 0.08" (2mm) gripping diameter
- 5.5" (140mm) overall length
- CAT IV-600V/3A max; CAT III-1000V

ORDERING

TL741 Heavy Duty Plunger Style Hook Clips

TL742 Heavy Duty Plunger Style Pincer Grip Set



Insulated, flexible silicon shaft with good heat resistance

- 1000V, 4A
- 0.2" (5mm) jaw opening
- 6" (152mm) overall length
- CAT IV-600V; CAT III-1000V

ORDERING

TL742 Heavy Duty Plunger Style Pincer Grip Set

TL743/TL744 Sharp or Flat Blade Test Probe Set



TL743 Sharp Point for piercing insulation

- 1000V, 16A; CAT IV-600V/10A max; CAT III-1000V
- 0.7" (18mm) long tip with sharp 0.08" (2mm) diameter;
- 4.5" (115mm) overall length
- Includes protective cap

TL744 Flat Blade fit outlet receptacles

- 1000V, 10A; CAT IV-600V; CAT III-1000V
- 0.7" (17mm) long x 0.1" (2.5mm) flat tip; 4.9" (124mm) overall length

ORDERING

TL743 Slim Reach Test Probe Set
TL744 Flat Blade Test Probe Set

PQ500/PQ1000 CAT IV Test Lead Kits



Set of Four Test Lead Kit for Power Quality Analyzers and set of 2 Test Lead Kit for other Test Equipment

- 10 ft test leads (Banana-to-Banana)
- Test probes, Alligator clips, long reach spring loaded clips, and Ergonomic over mold grip
- CAT IV-600V/CAT III-1000V

PQ500 Test Lead Set

- 2φ 2-wire test lead kit (Black and Red ONLY)

PQ1000 Test Lead Set

- 3φ 4-wire test lead kit (Black, Red, Blue, Yellow)

ORDERING

PQ500	Test Leads
PQ1000	Test Leads

TL747 Electronic Sharp Test Probe Set



For use on high density components and boards and for piercing insulation

- 1000V, 6A max
- 0.35" (9mm) long tip with sharp 0.08" (2mm) diameter
- 4" (102mm) overall length
- CAT III-1000V

ORDERING

TL747	Electronic Sharp Test Probe Set
-------	---------------------------------

TL708/TL709 Alligator Clip Sets



Toothed jaws for solid gripping of fine wires

TL708 Heavy Duty Large Alligator Clips

- 1000V, 6A, CAT IV-600V; CAT III-1000V
- 1" (26mm) jaw length; 1.6" (40mm) jaw opening; 4.2" (107mm) overall length

TL709 Medium Alligator Clips

- 1000V, 16A, CAT III-1000V
- 1.4" (37mm) jaw length; 0.8" (20mm) opening; 3.9" (98mm) overall length

ORDERING

TL708	Large Heavy Duty Alligator Clips
TL709	Medium Alligator Clips

TL740 Industrial Plunger Style Test Clip Set



Spring loaded clip with steel jaws

- 1000V, 10A
- 0.6" (15mm) jaw opening
- 6.1" (155mm) overall length
- CAT III-1000V

ORDERING

TL740	Industrial Plunger Style Test Clip Set
-------	--

TL748 Spring Loaded Hook Tip Probes



Ideal for gripping a component lead or fine wire

- 1000V, 5A max
- 0.04" (1mm) gripping diameter
- 4.7" (120mm) overall length
- CAT IV-600V; CAT III-1000V

ORDERING

TL748	Spring Loaded Hook Tip Probes
-------	-------------------------------

TL726 Double Molded Silicone Test Lead Set



Right angle and straight end flexible leads with shrouded banana plugs

- 63" (1.6m) long
- Protective collar and insulated sleeve
- 1000V, 10A
- CAT IV-600V; CAT III-1000V

ORDERING

TL726	Double Molded Silicone Test Lead Set
-------	--------------------------------------

CT70 AC Circuit Load Tester



Tests 3-wire standard & GFCI receptacles. Display turns red when a problem is detected



Check for AC outlet load handling capabilities plus Outlet Tester functions

- AC Load Tester
 - Selectable loads of 12, 15 and 20 Amps
 - Measures loaded and unloaded AC Line Voltage (90.0 to 240.0V)
 - Calculates and displays 0.1 to 99.9% Voltage Drop and Line Impedance
 - Displays Peak Line Voltage (350.0V) and Frequency (45.0 to 65.0Hz)
- Outlet Tester functions
 - Neutral to Ground Voltage
 - Hot/Neutral/Ground Impedance
 - GFCI Trip Time
 - GFCI Trip Current
 - Open or Reversed wiring
 - Available Short Circuit Current (ASCC)
- Dimensions/Weight: 8 x 2.8 x 2" (203.2 x 71.1 x 50.8mm)/ 11.2oz (317.5g)
- 1 year warranty
- Complete with AC test cord (standard North American 3-prong plug)

ORDERING

CT70	AC Circuit Load Tester
CT70-AC	Replacement AC Power/Tester Cord

NOTE: This product is supplied with a standard North American 3-prong plug

RT30/RT32 Wireless Remote AC Circuit Identifier



FC CE

Patent Pending

Virtual electrician's helper remotely identifies/confirms correct circuit for mid-run wiring

- Simplify mid-run wiring jobs by easily identifying the correct circuit powering the cable to be spliced or repaired
- The innovative RT30 combines non-contact voltage detection with wireless signals to monitor and remotely report the presence of voltage on a wire
- Clamped onto a live wire, the transmitter signals the user at the breaker panel with LED and audible alerts on the receiver (up to 100m range); The alerts stop when the correct circuit breaker is switched and work can then be performed safely
- Eliminates the need for an assistant or back-and-forth trips to confirm the correct circuit is powered down
- The RT30's clamp-style probe accessory is ideal for wires that are hard to isolate or reach
- Easily identify lighting and outlet circuits
- 1 year warranty
- Includes transmitter, receiver, remote clamp-style probe, 4 "AAA" batteries and pouch case

ORDERING

RT30	Wireless AC Circuit Identifier (914MHz)
RT32	Wireless AC Circuit Identifier (869MHz)

(NOTE: USA, Mexico, and Canada use 914MHz model and majority of other countries use 869MHz model)



CB10-KIT Electrical Troubleshooting Kit



Special Value Kit

Handy Electrical Troubleshooting Kit Performs 5 Functions

- **CB10** Circuit Breaker Finder (see below for details) — quickly locate Circuit Breakers with audible and visual alert
- **CT20** Continuity Tester/Wire Tracer (p. 46) — Use Continuity Tester for local continuity or for remote wiring identification; Continuity testing via bright flashing LED and loud pulsating beeper
- **DV20** AC Voltage Detector/Flashlight (p. 38)— Non-Contact Detection of AC Voltage from 100VAC to 600VAC
- Supplied in a soft carrying case that provides protection and organization for the meters and accessories; 1 year warranty

ORDERING

CB10-KIT	Electrical Troubleshooting Kit
----------	--------------------------------



CB10 Circuit Breaker Finder



3-in-1 tester to locate fuses, test receptacles and GFCI circuits

- Plug the Transmitter tester into an outlet and locate the correct breaker at the electrical box
- Transmitter & Receiver snap together for storage
- Transmitter/Tester:
 - Tests GFCI circuits
 - Tests Reversed/Open Connections,
 - LED indication of 2 test conditions and 5 wiring faults
 - Lights indicating circuit condition
- Dims/Wt: Receiver: 6.4x2.2x1.5" (162x55x38mm)/ 4oz (113g); Transmitter: 3.25x1.75x1" (83x44x25mm)/1.6oz (45g)
- Complete with one Receiver, one Transmitter tester, and 9V battery for the Receiver; 1 year warranty

ORDERING

CB10	Circuit Breaker Finder
------	------------------------

ET10/ET15 Receptacle Testers



Built-in lights indicate circuit conditions

- Tests for faulty wiring in 3-wire receptacles
- Tests Reversed/Open Connections
- Detects 5 separate faults: Open Ground, Open Neutral, Open Hot, Hot/Ground Reverse, and Hot/Neutral Reverse
- 1 year warranty
- **ET10 Additional Function**
 - Tests GFCI Circuits

ORDERING

ET10	GFCI Electrical Tester
ET15	Electrical Tester

NOTE: These products are supplied with a standard North American 3-prong plug

CT20 Continuity Tester Pro



One person operation for wire and cable testing both local and remote

- Provides positive continuity checks with bright flashing LED and loud pulsating beeper
- Identify wire pairs and cables remotely using external probe
- Wire verification distance up to 10,000ft (3000m); cable size of 26AWG minimum
- Flashing remote probe - two lead, bi-colored (red/ green) LED probe allows a single user to identify up to three wires or cables at a time for correct labeling with only one trip to the other end location
- Great for Electricians and Helpers, Cable TV and Audio System Installers, Alarm Technicians, HVAC Installers, and Auto Repair Technicians
- Dims: 3.6x2.2x1.14" (90x57x29mm); Wt: 9.2oz (260g)
- 1 year warranty
- Includes Remote probe with bi-colored LED for wire identification highlight

ORDERING

CT20	Continuity Tester Pro
------	-----------------------

CT40 16-Line Cable Identifier/Tester Kit



Electrical/electronic circuits — identify up to 16 local or remote lines

- CAT III-600V MultiMeter with 7 functions
- Transmitter/Receiver enables one person to remotely identify up to 16 wires
- Transmitter displays two red LED lamps and Receiver two digit blue LED display
- Includes 17 built-in alligator clips with the Transmitter and 2 built-in alligator clips with the Receiver
- Cable resistance of 30kΩ max
- Wire voltage check from 5 to 16VDC
- Data Hold, Max Hold, Auto power off; Low battery indicator (transmitter/receiver)
- 1 year warranty
- Complete with 16-line Transmitter, MultiMeter/Receiver, batteries, and case

MULTIMETER SPECIFICATIONS

DC/AC Voltage (Basic DCV Accuracy)	0.1mV to 600VDC/ 1mV to 600VAC (±1.0% DCV)
DC/AC Current	0.1µA to 200mA
Resistance	0.1Ω to 20MΩ
Diode/Continuity	Yes
Dimensions/Wt	6.3x2.9x1.7" (162x74.5x44mm)/ 10.8oz (308g)

ORDERING

CT40	16-Line Cable Identifier/Tester Kit
------	-------------------------------------

BT100 Battery Capacity Tester



Includes software with cable, Kelvin alligator clips, Kelvin test leads, and 6 AAA batteries



AC milliohmmeter checks Battery Condition in seconds while the battery is in service

- On-line testing without disconnecting battery
- Datalogger stores up to 999 tests manually or 9600 sets in continuous mode
- Simultaneously measures DC Voltage and AC Milliohms
- Long battery life 7 hours; Auto power off to save battery
- 1 year warranty
- Includes Windows® compatible software for downloading readings to a PC

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Resistance	40mΩ, 400mΩ, 4Ω, 40Ω	10µΩ, 100µΩ, 1mΩ, 10mΩ	±(1% rdg ± 10d)
Voltage	4V, 40V	1mV, 10mV	±(0.1% rdg ±6d)
Max Input Voltage	50VDC	50VDC	
Dimensions/ Wt	9.75 x 4 x 1.75" (250 x 100 x 45 mm)	17.5oz (500g)	

ORDERING

BT100	Battery Capacity Tester
BT102	120V AC Adaptor

CT100 Network Cable Tester



Continuity Tester for twisted pair cables and F Type coaxial cables

- Tests cable lengths from 3 to 600ft (0.9 to 183m);
Dimensions/Weight: 3.25x2x1.25" (83x51x32mm)/3.6oz (102g)
- 1 year warranty
- Complete with 2 AAA batteries.

Twisted Pair Features

- Tests EIA/TIA568A and 568B and 10Base-T
- Tests for shorts, opens, miswires and reversals
- Shield detection tests shield integrity
- Tests installed wiring and jumper cables; shielded or unshielded twisted pair cable; Cat 5e, Cat 5, Cat 4, and Cat 3

CATV Features

- "F" connector for troubleshooting CATV coaxial installations

ORDERING

CT100	Network Cable Tester
409992	Vinyl pouch carrying case

40180 Tone Generator and Amplifier Probe Kit



Heavy duty kit with audible tone easily identifies wires or cables

- Insulated inductive probe prevents shorting conductors
- Tests wire trace, continuity test, clear/busy/ringing line test and tip/ring identification
- Alligator clips for non-terminated cables and modular connectors for direct connections to telephone and internet wiring
- Built-in speaker with sensitivity control
- Dimensions: Probe - 9x2.3x1" (228x57x25mm);
Generator - 2.5x2.5x1.5" (64x64x38mm)/ Weight: 0.6lbs (272g)
- 1 year warranty
- Complete with Amplifier probe and Tone Generator with alligator clips and modular RJ11 phone and RJ45 digital connector cables, 9V batteries and case

ORDERING

40180	Tone Generator and Amplifier Probe Kit
-------	--

TG30 Wire Tracer/Tone Generator Kit



Transmitter injects traceable signal into cables, checks telephone lines, and performs continuity checks

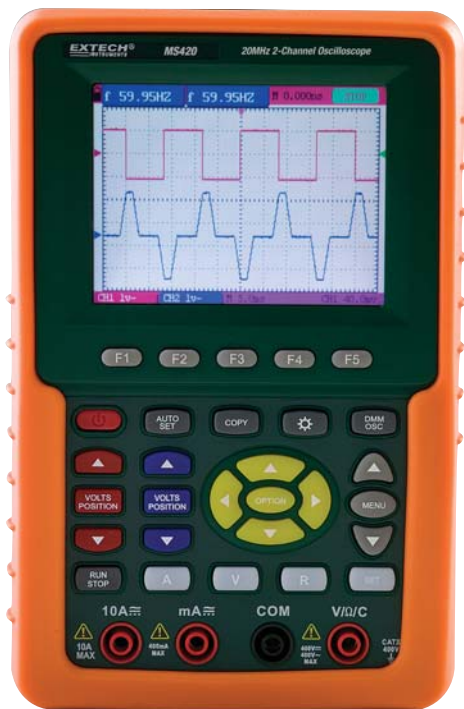
Trace communications and coaxial cables

- Non-Contact probe audibly identifies selected wire or cable
- Easily trace wires from source to termination
- Adjustable sensitivity control improves wire identification and eliminates false detection
- Continuity test — audible/visible indication
- Dimensions/Weight:
Probe - 5.8x1.1x1.1" (147x28x28mm) / 1.1 oz (30g);
Generator - 2.6 x 4.1x0.9" (67x103x23mm)/ 4.2oz (120g)
- 1 year warranty
- Complete with Tone probe and Tone generator with RJ11 and RJ45 phone connector plus adaptor with F type coaxial connector and pair of alligator clips, four LR44 batteries, 9V battery and carrying case

ORDERING

TG30	Wire Tracer/Tone Generator Kit
------	--------------------------------

MS420 20MHz 2-Channel Digital Handheld Oscilloscope



CE

3.8" (96mm) color LCD display simplifies viewing multiple waveforms

- 20MHz bandwidth
- Auto-set function optimizes the position, range, timebase, and triggering to assure a stable display of virtually any waveform
- Peak Detect function for 50ns glitch capture
- XY Mode
- Five Automatic Measurements: Frequency, Duty Cycle, Average, Peak to Peak, RMS
- Waveform Math: Add, Subtract, Multiply, and Divide
- Average Mode for smoothing waveforms
- Persistence Mode for observing dynamic signals
- Store and recall up to 4 waveform screens and setups
- USB interface and PC software for transferring waveforms and data

SPECIFICATIONS

Display Size	3.8" (96mm) color LCD; 320 x 240 pixels
Bandwidth	20MHz
Real time sample rate	100MS/s
Risetime	17.5ns
Channels	2
Record Length	6K points per channel
Glitch Capture	50ns
Vertical Sensitivity	5mV to 5V/div
Vertical Resolution	8 bits
Timebase Range	5ns to 5s/div
Sample Mode	Sample, Average, Peak Detect
Trigger Modes	Free Run, Single Shot, Edge, Video
Trigger Source	CH1, CH2
Trigger Coupling	AC, DC
Input impedance	1M Ω /20pF
Max Input Voltage	400V (peak)
Cursor Measurement	Voltage and time

True RMS MultiMeter Functions

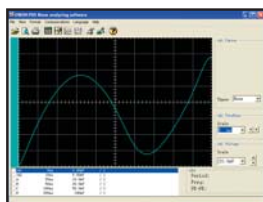
AC/DC Voltage	400mV, 4V, 40V, 400V
AC/DC Current	40mA, 300mA, 20A
Resistance	400 Ω , 4k Ω , 40k Ω , 400k Ω , 40M Ω
Capacitance	51.2nF to 100 μ F
Diode and Continuity	Yes
PC Interface	USB cable
Power Supply	6 hours Li-ion rechargeable battery; AC Adaptor/charger
Dimensions/Weight	7x4.4x1.6" (180x113x40mm) / 24.3oz (690g)

ORDERING

MS420	20MHz 2-Channel Oscilloscope
PWRCORD-MS420	European Power Cord for MS420



Complete with two 1X/10X oscilloscope probes, test leads, Windows® compatible software, capacitor measuring module, adjustment screwdriver, universal AC adaptor, and carrying case



Software PC screens display analog bargraph and graphical waveform



MS6060/MS6100/MS6200 2-Channel Digital Handheld Oscilloscopes

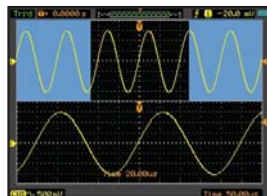


CE Available Q4 2011

5.7" (144mm) color LCD display simplifies viewing multiple waveforms with 3 models to choose from 60MHz, 100MHz, or 200MHz bandwidth

- One-touch automatic setup optimizes the position, range, timebase, and triggering to assure a stable display of virtually any waveform
- Easy-to-use pop-up menu with built-in multi-language help system
- 23 Automatic Measurements
- Waveform Math: Add, Subtract, Multiply, and Divide
- Store and recall up to 1000 waveform screens and setups using the installed 2G microSD card
- Automatic cursor tracking measurements
- XY Mode
- Built-in FFT function converts a time-domain signal into its frequency components to measure harmonic content and distortion in systems
- Waveform Recorder to capture/replay input waveforms from CH1 and CH2 with a maximum record length of 1000 frames
- Pass-Fail function compares a stored waveform to an unknown input
- Average Mode for smoothing waveforms
- Square Wave Output (2V, 1kHz) for probe adjustment
- 6,000 count MultiMeter with analog bargraph
- USB interface and software for transferring waveforms and data
- Complete with two 1X/10X oscilloscope probes, test leads, Windows® compatible software and USB cable, universal AC adaptor/charger, and carrying case

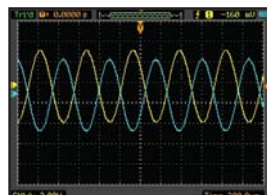
SPECIFICATIONS	MODEL MS6060	MODEL MS6100	MODEL MS6200
Oscilloscope Functions			
Bandwidth	60MHz	100MHz	200MHz
Real time sample rate	1GS/s	1GS/s	1GS/s
Risetime	5.8ns	3.5ns	1.8ns
Glitch Capture	8ns	2.5ns	2.5ns
Common Oscilloscope Functions			
Record Length	1M points per channel		
Display Size	5.6" (142mm) color LCD; 640x480 pixels		
Channels	2		
Vertical Sensitivity	2mV to 5V/div		
Vertical Resolution	8 bits		
Timebase Range	2ns to 2000s/div		
Sample Mode	Normal, Average, Peak Detect		
Trigger Modes	Edge, Pulse, Alt, Video		
Trigger Source	CH1, CH2		
Trigger Coupling	AC, DC		
Input impedance	1MΩ/15pF		
Max Input Voltage	300V (peak)		
Cursor Measurement	Voltage and time; Delta (CH1-CH2)		
Common True RMS MultiMeter Functions			
AC Voltage	60mV, 600mV, 6V, 60V, 600V		
DC Voltage	60mV, 600mV, 6V, 60V, 600V, 800V		
AC/DC Current	60mA, 600mA, 10A		
Resistance	600Ω, 6kΩ, 60kΩ, 600kΩ, 6MΩ, 60MΩ		
Capacitance	5nF to 400μF		
Diode and Continuity	Yes		
PC Interface	USB cable		
Power Supply	3 hours Li-ion rechargeable battery; AC Adaptor/Charger		
Dimensions/Weight	9.6 x 6.4 x 2" (245 x 163 x 52mm) / 2.6lbs (1.2kg)		



ALT Mag Display



Dual Channel Math Function



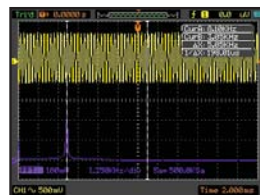
Reference Function Window



MultiMeter Mode



X-Y Format



The Pass/Fail Test

ORDERING

MS6060	60MHz 2-Channel Oscilloscope
MS6100	100MHz 2-Channel Oscilloscope
MS6200	200MHz 2-Channel Oscilloscope
TL620	60-200MHz Oscilloscope Probe
TL625	High Voltage 2500V, 100MHz Probe
BATT-74V	Rechargeable Batteries (7.4V/ 3500mAh)

LCR200 Passive Component LCR Meter



L, C, R measurements to 100kHz

- Simultaneous 20,000/2,000 count backlit display of the primary parameter (L, C or R) with the secondary parameter of Q (quality), D (dissipation) R (resistance), θ (phase), or ESR (equivalent series resistance)
- Auto Select measurement function with 1kHz default test frequency
- Five test frequencies
- Set Hi/Lo limits using absolute values or percentage limits
- Relative function, Auto power off with disable, Low battery and over-range indicators
- Parallel or Series equivalent circuit
- Built-in test fixture or use external test leads
- RS-232 interface
- Open and Short calibration removes unwanted stray impedances from the measurement
- 1 year warranty
- Complete with test leads, 9V battery, and carrying case
- Optional SMD Tweezer (LCR203) and plug-in SMD Component Fixture (LCR205)

SPECIFICATIONS	RANGE	BASIC ACCURACY
Inductance	20 μ H, 200 μ H, 2000.0 μ H, 20.000mH, 200.00mH, 2000.0mH, 20.000H, 200.00H, 2000.0H	$\pm(0.5\%rdg)$
Capacitance	20pF, 200pF, 2000pF, 20.000nF, 200.00nF, 2000.0nF, 20.000 μ F, 200.00 μ F, 2.0000mF, 20.00mF	$\pm(0.5\%rdg)$
Resistance	20.00 Ω , 200.00 Ω , 2.0000k Ω , 20.000k Ω , 200.00k Ω , 2.0000M Ω , 20.000M Ω , 200.0M Ω	$\pm(0.5\%rdg)$
DF (with C)	0.000 to 999	
Q	0.000 to 999	
Phase	$\pm 90^\circ$	
Test Frequency	100Hz/120Hz/1kHz/10kHz/100kHz	
Dimensions/ Weight	7.6 x 3.5 x 1.6" (193 x 88 x 41mm)/ 14.8oz (420g)	

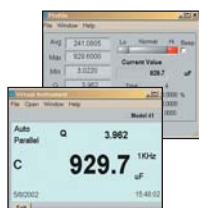
ORDERING

LCR200	Passive Component LCR Meter
LCR203	SMD Tweezer for Model LCR200
LCR205	SMD Component Fixture for Model LCR200



LCR203 — Optional SMD Tweezer for sorting out SMD components
LCR205 — Optional SMD Component Fixture

380193 Passive Component LCR Meter



Complete with software, cable, test leads with alligator clip, 9V battery, and protective holster

Measures Inductance, Capacitance, and Resistance with secondary parameter

- Simultaneous 20,000/10,000 count backlit display of the primary parameter (L, C or R) with the secondary parameter of Q (quality), D (dissipation) or R (resistance)
- Set Hi/Lo limits using absolute values or percentage limits
- Parallel or Series equivalent circuit
- Max/Min/Avg; Auto power off with disable; Automatic blown fuse indication
- Built-in test fixture or use external test leads
- Open and Short Zero removes unwanted stray impedances from the measurement
- Relative mode, zero, or supplied reference
- 1 year warranty

SPECIFICATIONS	RANGE	BASIC ACCURACY
Inductance	2000.0 μ H, 20.000mH, 200.00mH, 2000.0mH, 20.000H, 200.00H, 2000.0H, 10000H	$\pm(0.7\%rdg)$
Capacitance	2000.0pF, 20.000nF, 200.00nF, 2000.0nF, 20.000 μ F, 200.00 μ F, 2000.0 μ F	$\pm(0.7\%rdg)$
Resistance	20.000 Ω , 200.00 Ω , 2.0000k Ω , 20.000k Ω , 200.00k Ω , 2.0000M Ω , 20.000M Ω	$\pm(0.5\%rdg)$
DF (with C)	0 to 0.9999	$\pm(0.7\%rdg)$
Q	0 to 9999	$\pm(1.2\%rdg)$
Test Freq.	120Hz and 1kHz	
Dimensions/Weight	7.56x3.58x2.1" (19.2x9.1x5.25cm) / 12.87oz (365g)	

ORDERING

380193	Passive Component LCR Meter
153117	117VAC adaptor
153220	230VAC adaptor

RC100 R/C SMD Tweezer Tester



Fast, precise identification and measurement of surface mount components

- Relative mode for zero or user supplied reference
- Auto power off, over-range and low battery indicators
- Complete with two AG13 batteries and slide cover for storage; 1 year warranty

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Resistance	400, 4k, 40k, 400k, 4M, 40MΩ	0.1Ω	±(1.2% of rdg)
Capacitance	4nF, 40nF, 400nF, 4μF, 40μF, 200μF	1pF	±(3.0% of rdg)
Diode Test	1mA @ 1.5V approx		
Dimensions/ Weight	7.1x1.4x0.8" (181x35x20mm)/ 2.3oz (65g)		

ORDERING

RC100	Passive Component R/C SMD Tweezer Tester
-------	--

RC200 R/C SMD Tweezer Component Test with Built-in MultiMeter



Interchangeable test leads for voltage and SMD Tweezers

- Auto/manual ranging; CAT III-600V
- Over-range and low battery indicators and Auto Power off
- Includes two button batteries, test leads, SMD tweezers, cover and case; 1yr warranty

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
AC/DC Voltage	600mV, 6V, 60V, 600V	0.1mV	±(1.0% AC/ ±(0.8% DC
Resistance	600, 6k, 60k, 600k, 6M, 60MΩ	0.1Ω	±(1.5% of rdg)
Capacitance	6nF, 60nF, 600nF, 6μF, 60μF, 600μF, 6mF, 60mF	1pF	±(3.0% of rdg)
Diode/ Continuity Test	1mA @ 1.5V approx / <40Ω; 1.5mA test current Max.		
Dimensions/ Weight	7.1 x 1.4 x 0.8" (181 x 35 x 20mm)/ 2.3oz (65g)		

ORDERING

RC200	MultiMeter with SMD Tweezer Component Test
RC200-TL	Replacement Test Lead Tip
RC200-TT	Replacement Tweezer Tip

MC108/MC200 Digital Mini Microscopes



FC CE

MC108 - Mini Microscope

Color LCD screen with memory and zoom features to capture and download JPEG images to your PC plus video with advanced model

- LED illumination with adjustable brightness and contrast
- 5 Image Effect modes: Normal, Gray, Inverse, Emboss, and Dual Window View
- Dual Window View displays the magnified image next to the original image
- Real-time imaging on your PC screen via USB interface and included software
- Complete with batteries, adaptor/charger, Windows® compatible PC software with mini USB cable, cleaning cloth, and wrist strap; MC108 also includes a stand; MC200 also includes a Video cable, memory card and case; 1 year warranty

Model MC108 Microscope

- 4.6cm TFT Color LCD Screen with 7x to 108x magnification range; Optical Zoom: 7x to 27x; Digital Zoom: 4x; Captures JPEG images (320x240 pixels) with 2MB memory
- Dimensions: 4.7x2.2x0.8" (120x56x20mm)/Weight: 2.5oz (70g) without batteries

Model MC200 Microscope/Camera

- 7.1cm TFT Color LCD Screen with 1x to 200x magnification range; Optical Zoom: 1x to 10x (continuous) and 40x; Digital Zoom: 5x; Captures video and JPEG images (1600x1200 pixels) with 2G microSD memory card
- Dimensions: 5.1x2.6x1.1" (129x67x28mm)/Weight: 5.6oz (160g) including battery



MC200 - Mini Microscope/Camera

ORDERING

MC108	Mini Microscope (110V)
MC108-2	Mini Microscope (220V)
MC108-4	Mini Microscope (240V)
MC200	Mini Microscope/Camera (110V)
MC200-2	Mini Microscope/Camera (220V)
MC200-4	Mini Microscope/Camera (240V)

382200/382202 Digital Single Output DC Power Supplies



Adjustable 30V/1A and 18V/3A supplies with dual LCD displays

- Constant voltage or current
- Dual backlit LCD displays, Short circuit protection, Current limiting, High load/line regulation, Low noise/ripple, and Banana plug output terminals
- Complete with power cord; 1 year warranty

SPECIFICATIONS	MODEL 382200	MODEL 382202
Display Accuracy (V, A)	±(1.5%rdg); ±(2%rdg)	±(1.5%rdg); ±(2%rdg)
Voltage Output, DC	30.0 Volts	18.0 Volts
Current Output, DC	0 – 1.00 Amp	0 – 3.00 Amps
Ripple and Noise	<0.5mV/<3mA	<0.5mV/<3mA
Line Regulation	< 0.01% + 3mV/< 0.2% + 3mA	< 0.01% + 3mV/< 0.2% + 3mA
Load Regulation	< 0.01% + 2mV/< 0.2% + 3mA	< 0.01% + 2mV/< 0.2% + 3mA
Power	115V/230V; 50/60Hz	115V/230V; 50/60Hz
Dimensions/Weight	9.4x4.25x6" (240x108x154mm)/ 4.4lbs (2kg)	9.4x4.25x6" (240x108x154mm)/ 6.6lbs (3kg)

ORDERING

382200	DC Power Supply 30V/1A
382202	DC Power Supply 18V/3A

382203/382213 Analog or Digital Triple Output DC Power Supply



Adjustable to 30V/3A with fixed 5V and 12V outputs

- Adjustable Voltage and Current output
- Easy snap terminals for fixed 5V/0.5A and 12V/1A outputs
- Constant Voltage or Current, Current limiting indicator, Overload and short circuit protection, and Binding post terminals for variable supply
- Complete with power cord; 1 year warranty

SPECIFICATIONS

Display	382203 - Analog or 382213 - Digital (V&A), 3 digit 0.1 res. LCD
DC Voltage/Current Output	0 to 30 Volts/ 0 to 3 Amps
Ripple and Noise	<5mV
Line/Load Regulation	<0.05%+10mV
Fixed Output Voltage	5V/0.5A (cont.), 1A(max); 12V/0.5A (cont.), 1A(max)
Power	110/220VAC 50/60Hz
Dimensions/ Weight	6 x 5.6 x 9.5" (152 x 142 x 242)/ 11lbs. (5kg)

ORDERING

382203 N	Analog DC Power Supply, 115/220 VAC
382213 N	Digital DC Power Supply, 115/220 VAC

382260 80 Watt Switching Mode DC Power Supply



Current limited DC supply for electronic repair and calibration



3 output ranges perform like 3 power supplies in one

- Constant voltage or current with 3 selectable ranges
- Compact, lightweight design with 4-Digit LED display and Front/Rear output terminals
- Remote sensing for accurate applied voltage at load point
- Complete with AC Power cord; 1 year warranty

SPECIFICATIONS

Voltage Output (3 ranges)	0.10 to 16.40V, 0.10 to 27.60V, 0.10 to 36.80V
Current Output (3 ranges)	0.100 to 5.100A, 0.100 to 3.100A, 0.100 to 2.300A
Basic accuracy	±1%
Ripple & Noise	<30mVpp
Line Regulation/Load Regulation	<4mV/ <20mV
Power	90-264VAC; 47-63Hz
Dimensions/Weight	13 x 5 x 2" (330 x 127 x 53.5mm)/4.2lbs (1.9kg)

ORDERING

382260	80W Switching Mode DC Power Supply
--------	------------------------------------

382270 210 Watt Quad Output DC Power Supply



Two fully adjustable 30V/5A outputs combined with 2 auxiliary semi adjustable outputs

- Selectable Constant Voltage and Constant Current modes
- Two auxiliary outputs with variable voltage and fixed current
- Outputs up to 60V in series mode or 10A in parallel mode
- Includes 4 pairs of test leads (banana plug to alligator clip) & power cord; 1yr warranty

SPECIFICATIONS

Output Voltage (4)	0 to 30V, 0 to 30V, 3 to 6.5V, 8 to 15V
Output Current (4)	0 to 5A, 0 to 5A, 3A (fixed), 1A (fixed)
Basic Accuracy	±(0.5%+2 digits)
Load/ Line Voltage Regulation	±0.02%+3mV
Ripple and Noise	<0.5mVrms
Power	100 to 240VAC, 50/60Hz
Dimensions/ Weight	10.2x6.3x14.5" (260x160x370mm)/ 26.5lbs (12kg)

ORDERING

382270	Quad Output DC Power Supply
--------	-----------------------------

382280 200 Watt Triple Output Programmable DC Power Supply



40V/5A programmable supply with high resolution output and 200 test setup memories; 1 adjustable and 2 fixed outputs

- Selectable constant Voltage or Current modes
- 0 to 60 second programmable overload delay timer
- Forced air cooling fan and Dual output terminal for source and monitor connections
- Bi-directional PC interface commands allow setup and readback using Windows® HyperTerminal or similar PC communications programs
- Complete with power cord; 1 year warranty

SPECIFICATIONS

Programmable Voltage/ Current Output	0 to 40V (1mV)/ 0 to 5A (1mA)	0.05% ±9mV/ 0.2% ±9mA
Fixed Outputs	5V/2A and 3.3V/3A	
Ripple & Noise	< 3mV	
Load Regulation	1mV/A	
Power Source	110 or 220VAC, 50/60Hz	
Dimensions/ Weight	12.2 x 9.9 x 5.3" (310 x 250 x 135mm)/ 8.4lbs (3.8kg)	

ORDERING

382280	Triple Output Programmable DC Power Supply
--------	--

382275/382276 600 Watt Single Output Laboratory Grade DC Power Supply



Dual Action Voltage/Current Controls—push knob for fine/coarse adjustments

- Remote Control for output Voltage/Current and On/Off
- Two user-defined Voltage and Current presets and one 13.8V/20A factory preset
- Automatic Constant Current crossover, High RFI immunity and excellent EMI
- Thermostatic Control Fan from zero to full speed
- Complete with power cord; 1 year warranty

SPECIFICATIONS

Output Voltage/Current (Res.)	0 to 30V (100mV)/ 0 to 20A (100mA)
Basic accuracy	±(0.5%+2 digits)
Load/Line Voltage Regulation	50mV/ 20mV
Load/Line Current Regulation	100mA min/ 50mA min
Ripple and Noise	<5mVrms
Dimensions/ Weight	7.9 x 3.5 x 8.5" (200 x 90 x 215mm)/ 5.7lbs (2.6kg)

ORDERING

382275	Laboratory Grade Switching Mode DC Power Supply (120V)
382276	Laboratory Grade Switching Mode DC Power Supply (230V)

382357 Clamp-On Ground Resistance Tester



Verify resistance of cellular and communication tower ground grids

Enables non-contact measurements of ground conductors without need for auxiliary ground spikes

- Autoranging ground resistance and True RMS AC Leakage current measurements
- Programmable datalogging with 116 readings
- Programmable Hi/Lo alarm
- 0.9" (23mm) Jaw size for large ground rods
- Simplifies ground resistance measurements on multiple point ground systems
- Auto power off
- Verification resistors confirm accuracy
- Automatic Self Calibration when powered on
- 9999 Count LCD display with Data Hold
- Electrical Noise Detection feature prevents inaccurate readings
- CAT III-300V, CAT II-600V
- 1 year warranty
- Complete with 9V battery, Resistance check plate, and durable metal storage case

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Ground Resistance	0.025 to 1500Ω	0.002Ω	±1.5%
AC Leakage Current (Trms)	1mA	0.001mA	±2.5%
AC Current (Trms)	0.3mA to 30.00A	0.01A	±2.0%
Resistance Test Frequency	3.333kHz		
Operating Temperature	4 to 122°F (-20 to 50°C)		
Dimensions/Weight	10.2x4.4x1.9" (258x110x47mm) / 1.5lbs (700g) (meter only)		

ORDERING

382357 **N** Clamp-On Ground Resistance Tester

382252 Earth Ground Resistance Tester Kit



Includes all hardware necessary to measure earth ground in 3 ranges from 20 to 2000Ω

- Large dual display with backlight and double molded housing
- Test Hold function
- Automatic Zero adjustment
- AC/DC Voltage, Resistance, and Continuity
- Auto Power off, Over-range and low battery indication
- 1 year warranty
- Complete with test leads, two auxiliary earth bars, carrying case, and six 1.5V AA batteries

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Earth Ground Resistance ranges	20Ω/ 200Ω/2000Ω	0.01Ω/ 0.1Ω/1Ω	±(2%rdg)
Test Current (Freq.)	<2.5mA (820Hz)	0.001mA	±2.5%
AC Earth Voltage (Freq.)	0 to 200VAC (50 to 400Hz)		±(3%rdg)
DC Voltage	0 to 1000V	0.1V	±(0.8%rdg)
Resistance	0 to 200kΩ		±(1%rdg)
Continuity	40Ω		
Category rating	CAT III-1000V		
Dimensions/ Weight	7.9x3.6x2" (200x92x50mm)/ 1.5lbs (700g) (meter only)		

ORDERING

382252 **N** Earth Ground Resistance Tester Kit

382253 Replacement Earth Bars (2pk)

382254 Replacement Set of Test Leads

GRT300 4-Wire Earth Ground Resistance Tester Kit



Complete with test leads, 4 auxiliary earth bars, hard carrying case, and eight 1.5V AA batteries

Includes all hardware necessary to measure earth ground in 4 ranges

- 4-wire, 3-wire, and 2-wire testing
- Large dual line LCD
- Autoranging
- Automatic I (current) spike check and Automatic P (potential) spike check
- Test Hold function for easy operation
- Automatic Zero adjustment
- AC Earth Voltage
- Data Hold and Auto Power off features
- Over-range and low battery indication
- 1 year warranty

SPECIFICATIONS

Earth Ground Resistance ranges	2Ω/20Ω/200Ω/2000Ω
Basic Accuracy	±(2%rdg)
Resolution	0.01Ω/0.1Ω/1Ω/0.01kΩ
Test Current / Frequency	<2mA/820Hz
AC Earth Voltage / Frequency	0 to 300VAC/40 to 500Hz
Power supply	Eight 1.5V 'AA' Batteries
Dimensions	9.8 x 7.8 x 4.3" (250 x 190 x 110mm)
Weight	3.15lbs (1.4kg) - batteries included

ORDERING

GRT300	N	4-Wire Earth Ground Resistance Tester Kit
382153		Replacement Earth Bars (2pk)
382154		Replacement Set of Leads

UM200 High Resolution Micro-Ohm Meter



Complete with 4-wire cables with Kelvin clip connectors, rechargeable Li-Polymer battery, AC adapter/charger, software and USB cable, and carrying case

Provides resolution down to 1μΩ using 4-wire Kelvin clip test leads

- 6 ranges with 3 sub-ranges in each current range
- Measurement of resistive and inductive materials
- Auto or Manual ranging
- High resolution to 1μΩ
- 5-Digit backlit LCD
- Built-in comparator for Hi/Lo/Go resistance testing with 20 sets of pre-stored values
- Store/Recall up to 3000 measurements
- 10A maximum test current
- Cable length measurement (feet or meters)
- RS-232 interface
- 1 year warranty
- Complete with 4-wire cables with Kelvin clip connectors, rechargeable Li-Polymer battery, AC adapter/charger, software and USB cable, and carrying case

SPECIFICATIONS	RANGE	RESOLUTION	CURRENT	BASIC ACCURACY
Resistance	60mΩ	1μΩ	10A	±(0.25%)
	600mΩ	10μΩ	1A	±(0.25%)
	6Ω	100μΩ	100mA	±(0.25%)
	60Ω	1mΩ	10mA	±(0.25%)
	600Ω	10mΩ	1mA	±(0.25%)
	6kΩ	100mΩ	100μA	±(0.75%)
Power	Rechargeable Li-Polymer Battery			
Dimensions/Weight	10.1 x 6.1 x 2.2" (257 x 155 x 57mm)/ 2.6lb (1160g)			

ORDERING

UM200	N	High Resolution Micro-Ohm Meter
-------	---	---------------------------------

380580 Battery Powered Milliohm Meter



Complete with 8 AA batteries, and 2 sets of test leads (4 wire with 4 alligator clips, 4 wire with 2 Kelvin alligator clips), and Built-in water resistant case with shoulder strap



High accuracy, high resolution portable Milliohm Meter for field use

- Four terminal Kelvin measurements
- Over-temperature and over-voltage protection
- Auto-Hold and Auto power off
- Invalid test indicators prevent inaccurate measurements
- 1 year warranty

SPECIFICATIONS	RANGE	RESOLUTION	CURRENT	BASIC ACCURACY
Resistance	200.0mΩ	0.1mΩ	100mA	±0.5%
	2000mΩ	1mΩ	100mA	±0.5%
	20.00Ω	0.01Ω	10mA	±0.5%
	200.0Ω	0.1Ω	10mA	±0.5%
	2000Ω	1Ω	1mA	±0.5%
Dimensions/ Weight	9.8x7.5x4.3" (250x190x110mm)/ 3.3lbs (1.5kg)			

ORDERING

380580 N	Battery Powered Milliohm Meter
380565	Test Leads w/Kelvin clips for 380580

380560/380562 High Resolution Milliohm Meter



Benchtop meter provides resolution down to 0.01mΩ

- Automatic zero; 5V test voltage
- Built-in comparator for Hi/Lo/Go resistance testing or selection
- Includes 4-wire cables with Kelvin clip connectors and power cord; 1 year warranty

SPECIFICATIONS	RANGE	RESOLUTION	CURRENT	BASIC ACCURACY
Resistance	20mΩ	0.01mΩ	1A	±0.2%
	200mΩ	0.1mΩ	1A	±0.2%
	2Ω	0.001Ω	100mA	±0.2%
	20Ω	0.01Ω	10mA	±0.2%
	200Ω	0.1Ω	1mA	±0.2%
	2kΩ	0.001kΩ	100μA	±0.2%
	20kΩ	0.1kΩ	10μA	±0.2%
Power	110VAC, 60Hz or 220VAC 50Hz			
Dims/Wt	11x8.3x3.5" (280x210x90mm)/ 4.85lb (2.2kg)			

ORDERING

380560 N	High Resolution Milliohm Meter, 110VAC
380562 N	High Resolution Milliohm Meter, 220VAC
380465	Spare Kelvin Clip Test Lead Set

380460/380462 Precision Milliohm Meter



Portable Milliohm meter provides resolution to 0.1mΩ

- Manual zero display adjust; Over-range indication
- Compact, durable field service housing with protective cover
- Includes 4-wire cables with Kelvin clip connectors and power cord; 1 year warranty

SPECIFICATIONS	RANGE	RESOLUTION	MAX VOLTAGE	BASIC ACCURACY
Resistance	200mΩ	0.1mΩ	3.8VDC	±0.75%
	2000mΩ	1mΩ	3.4VDC	±0.75%
	200Ω	100mΩ	3.2VDC	±0.75%
	2kΩ	1Ω	3.2VDC	±0.75%
Power	110VAC, 60Hz or 220VAC, 50Hz			
Dimensions/Weight	6.3x2.8x3.4" (160x120x85mm)/ 1.5lb (680g)			

ORDERING

380460 N	Precision Milliohm Meter, 110VAC
380462 N	Precision Milliohm Meter, 220VAC
380465	Spare Kelvin Clip Test Lead Set



380320 Analog High Voltage Megohmmeter



CE

Three Insulation Test Ranges with Live Circuit Warning

- Insulation Resistance ranges: 100M Ω , 200M Ω , and 400M Ω
- Basic accuracy $\pm 5\%$ of scale
- Three test voltages 250V, 500V, and 1000V
- Lock Power On feature for extended test times
- Fuse protected and automatic discharge circuit
- Measures continuity to 3 Ω , Resistance to 500 Ω , and AC Voltage to 600V
- 1.3mA short circuit current
- CAT III-600V
- Dimensions: 7.9x3.6x2" (200x92x50mm); Weight: 1.2lbs (546g) includes batteries
- 1 year warranty
- Complete with test leads, 6 x AA batteries, and hard carrying case

ORDERING

380320 Analog High Voltage Megohmmeter

380360 Digital Megohmmeter



CE

1000V digital tester with automatic 3 minute test

- Insulation Resistance ranges: 200M Ω and 2000M Ω with 0.1M Ω max resolution and $\pm 3\%$ of reading basic accuracy
- Three test voltages of 250V, 500V and 1000V
- Safety Power Lock enables "hands free" operation for 3 minute test
- Automatic discharge when "Press to Test" button is released
- Auto power off and Data Hold
- 0.65" (17mm) LCD display
- Automatic zero adjustment
- Continuity measurements to 200 Ω and Voltage to 600VAC
- CAT III-600V
- Dimensions: 6.3x3.8x2.3" (160x97x58mm); Weight: 13oz (369g)
- 1 year warranty
- Complete with 6 x AA batteries, heavy duty 2.5ft (0.8m) test leads, alligator clip, large probe, and case with neckstrap

ORDERING

380360 **N** Digital Megohmmeter

380260 Handheld Megohmmeter



CE

1000V digital tester with large dual backlit display

- Double molded housing for added durability
- Dual display of Insulation Resistance and Test Voltage
- Backlit super large display
- Insulation Resistance ranges: 200M Ω and 2000M Ω with 0.1M Ω max resolution and $\pm 3\%$ of reading basic accuracy
- 250V, 500V, and 1000V test voltages
- Auto power off
- Lo Ω function for testing connections
- Lock Power On Function for hands-free operation
- Data Hold
- CAT III-600V
- Dimensions: 7.8x3.6x1.9" (200x92x50mm); Weight: 24.6oz (700g)
- 1 year warranty
- Complete with heavy duty test leads, alligator clip, hanging strap, protective carrying case, and 6 x AA batteries

ORDERING

380260 **N** Handheld Megohmmeter

Restore Safety & Eliminate Downtime

Plant and electrical professionals rely on Extech's line of digital and analog insulation testers and megohmmeters for motor-related diagnostics including motor insulation resistance and MCCs as well as transformers. With available capabilities such as continuity test and voltage measurement, Dielectric Absorption Ratio, Polarization Index and CAT-IV ratings, Extech's insulation resistance testers and megohmmeters deliver accurate diagnostic results without compromising safety.



MG300/MG302 CAT IV Insulation Tester/MultiMeter with Wireless PC Interface

Combines a 1000V Insulation Tester with a True RMS MultiMeter

- Wireless USB interface transmits measurement data to a PC
- Large backlit triple display
- Insulation Resistance from 0.001MΩ to 4000MΩ
- Auto discharge
- Lock Power On Function for hands-free operation
- Data Hold to freeze displayed reading
- Min/Max and Relative mode
- Auto power off
- Waterproof (IP67) rugged design
- Complete with remote receiver with USB cable, Windows® compatible software, heavy duty 4-wire test leads, protective rubber holster, multimeter test leads, carrying case, and 6 x AA batteries

Note: USA, Mexico, and Canada use 915MHz model MG300. Most other countries use 433MHz model MG302.



SPECIFICATIONS

Insulation Resistance (max resolution)	4MΩ, 40MΩ, 400MΩ, 4000MΩ (0.001MΩ)
Basic Accuracy	±3%
Insulation Test Voltages	125V, 250V, 500V, 1000V
AC Voltage Test	1000V
Low Resistance Test	0 to 400Ω
MultiMeter Functions	
AC/DC Voltage (max resolution)	1000V (0.1mV AC/0.01mV DC)
AC/DC Current (max resolution)	10A (0.1μA AC/0.01μA DC)
Resistance (max resolution)	40MΩ (0.01Ω)
Frequency (max resolution)	100MHZ (0.001Hz)
Duty Cycle (max resolution)	0.1 to 99.9% (0.01%)
Temperature (max resolution)	-58 to 2192°F / -50 to 1200°C (0.1°)
4-20mA% (max resolution)	-25 to 125% (0.01%)
CE, FCC	CE, (FCC MG300 only)
Dimensions/Weight	7.8 x 3.6 x 1.9" (200 x 92 x 50mm)/ 20.5oz (582g)
Warranty	1 year

■ MG300 (915MHz) N | ▲ MG302 (433MHz) N



380363 Digital Insulation Tester

Autoranging insulation measurements to 10GΩ plus manual datalogging stores up to 9 data sets

- 250V, 500V and 1000V test voltages
- Large LCD display with analog bargraph
- Low Resistance function for testing connections
- Automatic discharge
- AC/DC voltage measurement up to 999V
- Auto power off
- Manual data record and read function (9 sets)
- Live circuit display warning and beeper
- Complete with carrying case, test leads, and 6 x AA batteries



380366 Insulation Tester + Datalogger

Autoranging insulation measurements to 4000MΩ with 1mA test current

- Datalogging function stores up to 16,000 readings with single store or a programmable rate of 1 to 65,000 seconds per sample
- 250V, 500V and 1000V test voltages
- Large dual 4000 count backlit LCD and fast 50 segment analog display
- Data Hold, Test Lock, Audible Continuity, Auto Sleep and Low Resistance functions
- Measure up to 600V AC
- RS-232 PC interface with Windows® compatible software
- Open circuit, overrange and low battery indications
- Complete with built-in carrying case with cover, test leads, alligator clips, RS-232 PC cable, software, neckstrap, and 8 x AA batteries



380395/380396 Digital High Voltage Insulation Tester

High test Voltages up to 5kV with Insulation Resistance to 60GΩ

- Test Voltages of 500V, 1000V, 2500V, and 5000V
- Large 6000 count display with bargraph and backlight
- Polarization Index (PI) measurement
- Dielectric Absorption Ratio measurement
- 1 to 15 minute Timer function for Insulation Resistance measurements
- AC/DC Voltage from 0 to 600V with MAX/Min, Peak and Relative functions
- Autoranging and timer measurement function
- Indication of output voltage and discharge voltage
- Auto-discharge and voltage output warning function
- Auto Power off and battery check
- Complete with test leads, 8 x C batteries, and heavy duty carrying case; **Model 380395** with 110V AC adaptor **Model 380396** with 220V AC adaptor

380363 N

4MΩ, 40MΩ, 400MΩ, 4000MΩ, 10GΩ (1kΩ)
±3%
250V, 500V, 1000V
999VAC
0 to 40Ω

—
—
—
—
—
—
—

CE
9.3x4.6x2.1" (235x116x54mm)/ 1.15lbs (520g)
1 year

380366 N

4MΩ, 40MΩ, 400MΩ, 4000MΩ (1kΩ)
±3%
250V, 500V, 1000V
600VAC
0 to 400Ω

—
—
—
—
—
—
—

CE
7.9x5.5x3.7" (200x140x95mm)/ 1.8lbs (900g)
1 year

■ 380395 N | ▲ 380396 N

6MΩ, 60MΩ, 600MΩ, 6GΩ, 60GΩ (1kΩ)
±2.5%
500V, 1000V, 2500V, 5000V
600VAC
0 to 600Ω

—
—
—
—
—
—
—

CE
7.8x5.8x3.4" (198x148x86mm)/ 3.2lbs (1438g)
1 year

Beyond Compare

"We use the Extech 380976 for power factor correction in commercial and industrial facilities as well as basic trouble shooting. Far more features than other, more expensive meters."

David L., Florida



380940 400A AC/DC Power Clamp Meter

Measures True Power, Current, and Voltage

- Large LCD with 40 segment analog bargraph
- Data Hold, Max/Min recall, Auto Zero (DC current), plus low battery indication
- Auto power off
- Complete with test leads, 2 AA batteries, and carrying case



380976-K 1-Phase & 3-Phase 1000A AC Power Clamp

Includes special test lead kit

- Measures True Power, Apparent Power, Reactive Power, Horsepower, Power factor, and Phase Angle with Lead/Lag indicator
- AC+DC μ A Current with 10nA resolution for flame rod tests
- Auto Detect AC/DC Voltage measurements with simultaneous Frequency display
- Test Lead Kit includes: two CAT IV-600V 72" (1.8m) lead extensions; two modular test probe handles; two plunger activated retractable jaw clips; two extra large alligator clips
- Complete with test lead kit, general Type K bead wire probe, case, and 9V battery

SPECIFICATIONS	380940 N	380976-K N
Display counts	4000 count LCD with bargraph	10,000 count LCD
Jaw size/Cable size	0.9" (23mm); 350MCM	1.6" (40mm); 500MCM
True RMS	Yes	Yes
True Power (max res.)	40kW, 240kW AC/DC (10W)	600kW (10W)
Basic Accuracy (ACA)	$\pm 1.5\%$ rdg	$\pm 2\%$ rdg
Apparent Power	—	600kVA (10VA)
Reactive Power	—	600kVAR (10VAR)
Power Factor	—	Yes
Phase Angle (ϕ)	—	-65 to +60°
Active Power Energy	—	—
Peak Capture	—	—
AC/DC Current (max res.)	400.0A AC/DC (0.1A)	100.00A, 1000.0A AC (10mA)
μ A AC+DC Current (max res.)	—	1000 μ A Trms (0.01 μ A)
AC/DC Voltage (max res.)	600VAC/400VDC (1AC/0.1VDC)	600V (0.1mV)
Resistance (max res.)	—	1000k Ω , 100M Ω (0.1 Ω)
Capacitance (max res.)	—	7000 μ F (0.001 μ F)
Frequency (max res.)	100Hz to 1MHz (0.01Hz)	40Hz to 1kHz (0.1Hz)
Temperature (max. res.)	—	-58 to 1000°F or -50 to 900°C (0.1°)
UL, CE, Category rating	CE, CAT II-600V	UL, CE, CAT III-600V
Dimensions/Weight	7.2X2.5X1.4" (183X64X36mm)/6.7oz (190g)	9x3x1.6" (228x76x39mm)/16.4oz (465g)
Warranty	1 year	1 year



382068 1000A AC/DC 1-/3-Phase Clamp Power Datalogger Kit

Datalogs up to 4000 readings

- 1000A Clamp measures 1 ϕ or 3 ϕ power to 600kW
- Dual display of kW+PF, kVA+PF, V+A, A+Hz or V+Hz
- Data Hold and Auto power off
- 25 point memory
- Full function display on large 4-digit LCD with fast 40 seg. bargraph, Peak Hold, and MIN/MAX
- Complete with Clamp-on Meter, 9V battery, alligator clips, test leads, Datalogger/RS-232 module, PC software with cable, and case



382075 2000A AC/DC 3-Phase Clamp Power Analyzer

Measures, computes, and displays 3-Phase Power on Balanced or Unbalanced Loads

- Display Lead/Lag Current/Voltage phase shift in degrees
- Store/recall last 4 readings
- DC Current Auto-Zero
- Dual displays: kW+PF, kVA+kVAR, phase-angle+Hz, Volts+Hz, or Amps+Hz
- Advanced Relative and Min/Max functions
- Data Hold
- Complete with test leads, carrying case, and 9V battery



PQ2070 1000A AC 1-/3-Phase Clamp Power Analyzer

Measures AC Current, Frequency, and Power including True Power, Apparent Power, Reactive Power and Active Power

- Built-in non-contact Voltage Detector with LED alert
- Measures 1 ϕ and balanced 3 ϕ kW, kVA, kVAR and kWh, plus Power Factor and Phase Angle
- Manually store/recall up to 99 data sets
- Data Hold and Max/Min
- Auto power off
- USB interface
- Complete with test leads, USB cable and software, carrying case and 9V battery

Available Q4 2011

382068 N	382075 N	PQ2070	SPECIFICATIONS
9999 count LCD with bargraph	9999 count LCD	9999 count LCD with bargraph (backlit)	Display counts
1.8" (46mm); 1000MCM	2.2" (55mm); 1000MCM	2.16" (55mm); 1000MCM	Jaw size/Cable size
Yes	Yes	Yes	True RMS
600kW (0.01kW)	1200kW (0.01kW)	750kW (10W)	True Power (max res.)
±1.5%rdg	±1.5%rdg	±2.0%rdg	Basic Accuracy (ACA)
600kVA (0.01kVA)	1200kVA (0.01kVA)	750kVA (10kVA)	Apparent Power
—	1200kVAR (0.01kVAR)	750kVAR (10VAR)	Reactive Power
Yes	Yes	Yes	Power Factor
—	-90° to +90° (0.1°)	0 to +90° (1°)	Phase Angle (ϕ)
—	—	9999kWh (0.001kWh)	Active Power Energy
1000A/600V	—	—	Peak Capture
1000.0A AC/DC (0.1A)	2000A AC/DC (0.1A)	1000A AC (0.1A)	AC/DC Current (max res.)
—	—	—	μ A AC+DC Current (max res.)
600V (0.1V)	600V (0.1V)	750VAC (0.1V)	AC/DC Voltage (max res.)
10k Ω (1 Ω)	—	—	Resistance (max res.)
—	—	—	Capacitance (max res.)
5kHz (0.1Hz)	40 to 400kHz (0.1Hz)	50Hz to 200Hz (1Hz)	Frequency (max res.)
—	—	—	Temperature (max. res.)
CE, CAT III-600V	UL, CE, CAT III-600V	CE, CAT III-600V	CE/UL/Category rating
10.2x3.7x1.8" (260x93x45mm)/15.9oz (450g)	10.7x4.8x1.8" (271x122x46mm)/24.7oz (700g)	11.5x3.75x1.5" (292x95x38mm)/18.4oz (522g)	Dimensions/Weight
1 year	1 year	1 year	Warranty

PQ3450/PQ3470 3-Phase Power Quality Analyzer/Dataloggers



Model PQ3450

Model PQ3470 with Harmonics

Available Q4 2011

Patent Pending

Clamp Probes for PQ3450 & PQ3470

Choose from clamp probes ranging from 200A to 3000A and flexible vs traditional jaw.



PQ34-2: 200A Current Clamp Probes with 0.8" (19mm) jaw opening



PQ34-12: 1200A Current Clamp Probes with 2" (50mm) jaw opening



PQ34-30: 3000A Flexible Current Clamp Probes (24"/600mm) for wrapping around busbars.

Choice of Numerical or Graphical display with Harmonics model

- Large, dot-matrix, sun readable, numerical, backlit LCD
- Optional 200A, 1200A Current Clamps or 3000A Flexible Current Probes
- Captured measurements can be imported directly into Excel via the SD memory card
- Adjustable Current Transformer CT (1 to 600) and Potential Transformer PT (1 to 1000) ratio for high power distribution systems
- Log up to 30,000 reading on a removable SD memory card in Microsoft Excel® format
- Wide sampling rate range (2 seconds to 2 hours)
- Built-in Clock and Calendar
- Easy-to-use on-screen menu
- Banana style input jacks
- Easy-to-hold rugged over molded housing
- Complete with meter, 4 voltage leads with alligator clips, 8 AA batteries, SD memory card, Universal AC adaptor (100 to 240V), and durable hard carrying case. Clamp probes sold separately

Model PQ3470 Additional Features

- On-screen Harmonics display (1 to 50th order)
- Simultaneous display of Harmonics and Waveform
- Simultaneous display of Voltage and Current waveforms
- Display of Waveform with peak values
- Analysis of Total Harmonic Distortion (THD)
- Graphic Phase diagram with 3-Phase system parameters
- 3-phase Voltage or Current Unbalanced Ratio (VUR, AUR) and unbalanced factor
- Capture Transient events (including dip, swell, and outage) with programmable threshold (%)

SPECIFICATIONS	RANGE	BASIC ACCURACY
ACV (True RMS)	600.0V	±(0.5%rdg)
ACA	1200A	±(0.5%rdg)
Active Power (MW)	9.999MW	±(1.0%rdg)
Apparent Power (MVA)	9.999MVA	±(1.0%rdg)
Reactive Power (MVAR)	9.999MVAR	±(1.0%rdg)
Power Factor	0.00 to 1.00	±0.04
Frequency Range	45Hz to 65Hz	±0.1Hz
Phase	-180° to +180.0°	±1°
Harmonics (PQ3470)	1 to 50th	±2% (1 to 20); ±4% (21 to 31)
Crest Factor (PQ3470)	1.00 to 99.99	±(5%)
Current Clamp input	200mV, 300mV, 500mV; 1V, 2V, 3V; user-adjustable	±(0.5%rdg)
Active Power Energy (MWH)	0.0kWh to 9.999MWH	±(2.0%rdg)
Apparent Power Energy (MVAH)	0.0KVAh to 9.999MVAH	±(2.0%rdg)
Reactive Power Energy (MVARH)	0.0KVARh to 9.999MVARH	±(2.0%rdg)
Datalogging	30,000 readings (2GB SD memory Card)	
Peak AC Voltage Accuracy (PQ3470)		±(5%)
Peak AC Current accuracy (PQ3470)		±(5%)
CE/CAT rating	CE/CAT III-600V	
Dimensions	8.86 x 4.92 x 2.52" (225 x 125 x 64mm)	
Weight	2.2lbs (1010g)	

ORDERING

PQ3450	3-Phase Power Analyzer/Datalogger
PQ3470	3-Phase Graphical Power and Harmonics Analyzer/Datalogger
PQ1000	Voltage Test Leads with Alligator and Plunger Clips (4 leads)
PQ34-2	200A Current Clamp Probes (Set of 3)
PQ34-12	1200A Current Clamp Probes (Set of 3)
PQ34-30	3000A, Flexible Current Probes (Set of 3)

PQ3350-1/PQ3350-3 3-Phase Power Quality & Harmonics Analyzers



CE



Includes (3) flexible current clamps, (4) voltage leads with alligator clips and retractable plunger clips, 8 AA batteries, universal AC adaptor, software, USB interface cable, and case

Power Measurements and Analysis + Datalogging of single and 3-phase/3-wire or 3-phase/4-wire systems

- **Model PQ3350-1** (1200A 12" flexible current clamp probes)
- **Model PQ3350-3** (3000A 24" flexible current clamp probes)
- Large backlighting LCD displays up to 35 parameters in one screen
- Clamp-on True RMS power measurements with on-screen Harmonics display
- Simultaneous display of Voltage and Current waveforms
- Analysis of Total Harmonic Distortion (THD-F)
- Maximum Demand (MDkW, MW, kVA, MVA) with programmable period
- Adjustable CT ratio (1 to 600) and VT ratio (1 to 3000)
- Graphic Phase diagram with 3-Phase system parameters
- 3-phase Voltage or Current Unbalanced Ratio (VUR, AUR) and unbalanced factor
- Calculated Unbalanced Current through Neutral Line (In)
- Capture 28 Transient events (including Dip, Swell and Outage) with programmable threshold (%)
- Optically isolated USB interface with software to download Waveforms, Power Parameters and Harmonics

SPECIFICATIONS	RANGES	BASIC ACCURACY
AC Voltage (True RMS)	600V	±0.5%rdg
AC Current (True RMS)	100A, 1000A, 3000A*	±0.5%rdg
Active Power (kW)	9.999MW	±1%rdg
Apparent Power (kVA)	9999kVA	VA=Vrms x Arms
Reactive Power (kVAR)	9999kVAR	VAR= sqrt (VA ² -W ²)
Power Factor	0.0 to +1.00	±1.5%rdg
Frequency	45-65Hz	0.1Hz
Phase	-180.0°~ 0°~ +180.0°	±1°
Harmonics	1 to 99	±2%
Crest Factor	1.00 to 99.99	±5%
Peak AC Voltage accuracy	±(5%rdg+30d)	
Peak AC Current accuracy	±(5%rdg+30d)	
Active Power Energy (kWh)	0mWh to 999,999kWh	
Reactive Power Energy (kVARh)	0.0kVARh to 1000MWh	
Datalogging	52428 records (1P2W)/17476 records (3P4W)	
CAT rating	CAT III-600V	
Dimensions/ Weight	Meter: 10.1 x 6.1 x 2.3" (257 x 155 x 57mm)/ 2.5 lbs (1160g) Clamp: 2.2" (55mm), 2.5" x 1.0" (64x24mm) busbar/ 1.3 lbs (600g)	

* Using PQ3220 Current Probe (included with PQ3350-3 kit)

ORDERING

PQ3350-1	1200A 3-Phase Power Harmonics Analyzer Kit (includes PQ3210)
PQ3350-3	3000A 3-Phase Power Harmonics Analyzer Kit (includes PQ3220)
PQ3350	3-Phase Power Harmonics Analyzer (Meter, Test Leads, and Case)
PQ1000	Voltage Test Leads with Alligator and Plunger Clips (4 leads)
PQ3110	100A Current Clamp Probes (Set of 3)
PQ3120	1000A Current Clamp Probes (Set of 3)
PQ3210	1200A, Flexible Current Probes (Set of 3)
PQ3220	3000A, Flexible Current Probes (Set of 3)

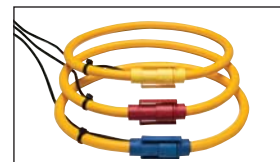
OPTIONAL CLAMP PROBES FOR MODEL PQ3350 POWER ANALYZER



Model PQ3110
100A Current Clamp Probes
with 1.2" (30mm) jaw opening



Model PQ3120
1000A Current Clamp Probes
with 2.2" (55mm) jaw opening

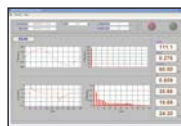


Model PQ3210 (1200A)
Model PQ3220 (3000A)
1200A (12"/304mm) or 3000A
(24"/609mm) Flexible Current
Clamp Probes for wrapping
around busbars

380820 Universal AC Power Source + AC Power Analyzer



CE



Software included

Front (1000W) and Rear (2000W max) universal output sockets for testing products from 85 to 250VAC, 45 to 65Hz

- Standby Power Measurement for desktop and notebook PCs, LCD TVs, AC adaptor/chargers, and other products that consume power when not in use
- Power Quality Measurement (Watts, Power Factor, Voltage, Current, Harmonics)
- Cost Function calculates cost per day, month, and year
- 99 memory locations for preset voltage and frequency output settings
- Standby and Operation button
- User-programmable Over Current Protection (current limiting)
- Programmable through the built-in RS-232 interface
- Data acquisition mode captures readings to your PC with a user-programmable sampling rate of 2 to 65,535 seconds
- Complete with AC power cord, RS-232 to USB cable and software; 1 year warranty

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Front Panel			
Output Voltage	85 to 250V	0.1V	±1%
Output Frequency	45 to 65Hz	0.01Hz	±0.1Hz
Power	10mW to 100W	0.1mW	±1%
AC Current	5mA to 1.5A	0.1mA	±1%
Power Factor	0 to 1	0.001	±0.04
Rear Panel			
Output Voltage	85 to 250V	0.1V	±1%
Output Frequency	45 to 65Hz	0.01Hz	±0.1Hz
Power	100mW to 2000W	0.1mW	±1%
AC Current	5mA to 10A	0.1mA	±1%
Power Factor	0 to 1	0.001	±0.04
Harmonics (in amps)	1 to 50th order	0.1mA	±1.4% (1-10th)
THD	0.0 to 999.9%	0.1%	±3%
Input Power Source	110V or 220V; 45 to 65Hz		
Dimension/ Weight	12 x 10.2 x 5.9" (305 x 260 x 151mm)/ 21.8lbs (9.9kg)		

ORDERING

380820 Universal AC Power Source/Analyzer

380801/380803 Appliance Tester/Power Analyzer



380803: Built-in Datalogger stores up to 1,012 readings (Single record storage or continuous datalogging).

380801: Used for data acquisition when connected to a PC.



Software included

Compact, battery operated device for analyzing AC power loads – with PC interface plus datalogging

- Four simultaneous displays of Power, Power Factor or VA, Voltage or Hz, Current
- True RMS Voltage & Current measurements of sine, square, triangular and distorted waveforms with a crest factor < 5
- Max, Data Hold and Overload Protection
- Battery power provides line isolation
- Plug device to be tested directly into the Power Analyzer
- Sampling (update) rate is 2.5 times/second
- Complete with Windows compatible software, cable, 8 x AA batteries, power cord, 117 VAC adaptor and protective hard case; 1 year warranty

SPECIFICATIONS	RANGE	RESOLUTION	ACCURACY (%RDG)	INPUT SIGNAL RANGE
Watt (AC)	200, 2000W	0.1W, 1W	±0.9%	300V, 20A, 50 - 400Hz
Power Factor (Watt/VA)	0 to 1.00	0.001	±4 digits	250V, 20A, 50/60Hz
Voltage	200V, 750V	0.1V, 1V	±0.9%	±0.2%
Current	2/20A via terminals 2/15A via sockets		±0.9%	(Fuse Protected)
Frequency	2kHz, 20MHz	1Hz to 10kHz	±0.5%	
Dimensions/Weight	13.9x11.8x3.9" (352x300x100mm) / 3.6lbs (1.6kg)			

ORDERING

380801 **N** True RMS Single Phase Power Analyzer
 380803 **N** True RMS Power Analyzer Datalogger
 USB100 RS-232 to USB Adaptor

401012 Outdoor Temperature Alarm



Audible Alarm alerts user when Temperature exceeds the setpoints

- Displays indoor/outdoor temperature
- Single or Dual point audible alarm (external sensor)
- Range: -58.0 to 158.0°F
Basic accuracy: $\pm 1.8^\circ\text{F}$ accuracy
Resolution: 0.1°F
- Dimensions: 2.75x2.75" (70x70mm); Weight: 3oz (85g)
- 1 year warranty
- Complete with internal plus 10ft (3m) weatherproof temperature sensor with adhesive backing, stand, one AAA battery, and screws for wall mounting

ORDERING

401012 Outdoor Temperature Alarm

401014 Indoor/Outdoor Thermometer



Built-in memory stores Minimum and Maximum Temperature readings

- Large LCD displays 1" (25mm) digits for indoor/outdoor temperature
- Indoor Range: 14 to 140°F (-10 to 60°C)
Outdoor Range: -58 to 158°F (-50 to 70°C)
Basic accuracy: $\pm 1.8^\circ\text{F} / 1^\circ\text{C}$
Resolution: $0.1^\circ\text{F}/^\circ\text{C}$
- Dimensions: 4.4x4x0.9" (112x102x22mm); Weight: 6.5oz (186g)
- 1 year warranty
- Complete with weatherproof temperature sensor with 9.6ft (3m) thin cable, stand, AAA battery, and wall mounting bracket

ORDERING

401014 Big Digit Indoor/Outdoor Thermometer

39240 Waterproof Thermometer



Pocket-size with MAX/MIN recording

- 2.75" (70mm) Stainless steel stem
- Data Hold and Auto power off
- Range: -40 to 392°F (-40 to 200°C)
Basic accuracy: $\pm 2^\circ\text{F}/1^\circ\text{C}$
Resolution: $0.1^\circ/1^\circ$ resolution
- Dimensions: 5.9x0.8x0.7" (150x20x18mm); Weight: 0.7oz (20g)
- 1 year warranty
- Complete with one LR44 button battery and protective cover

ORDERING

39240 Waterproof Thermometer

392050 Penetration Dial Thermometer



Sharp stainless steel probe measures temperature in air, liquids, and semi-solids

- 5" (130mm) stainless steel probe with 2" (54mm) dial
- Range: -58 to 302°F (-50 to 150°C)
Basic accuracy: $\pm 2^\circ\text{F}/1^\circ\text{C}$
Resolution: $0.1^\circ/1^\circ$ resolution
- ON/OFF switch saves battery life
- Auto Power off after 1 hour
- Weight: 1oz (29g)
- 1 year warranty
- Complete with 1.5V LR44 battery

ORDERING

392050 Penetration Dial Thermometer

480846 8GHz RF EMF Strength Meter



High frequency radiation measurement from 10MHz to 8GHz

- For electromagnetic field strength measurement including mobile phone base station antenna radiation, RF power measurement for transmitters, WAN detection/installation, wireless communication applications (CW, TDMA, GSM, DECT) and microwave leakage
- Non-directional (isotropic) measurement with 3-channel (triaxial) measurement probe
- Max Hold and Average functions
- Manual store/recall up to 99 sets
- Level exceed audible alarm with user selectable threshold
- 1 year warranty
- Complete with 9V battery and carrying case

SPECIFICATIONS	RANGE
Frequency range	10MHz to 8GHz
Directional Characteristic	Isotropic, 3-dimensional
Measurement Ranges	20mV/m to 108.0 V/m 53µA/m to 286.4mA/m 1µW/m ² to 30.93 W/m ² 0µW/cm ² to 3.093 mW/cm ²
Audible Alarm	Adjustable threshold with On/Off
Memory	Manual save/recall of 99 sets
Dimensions/Weight	2.6x2.4x9.7" (67x60x247xmm)/ 8.8oz (250g)

ORDERING

480846	RF EMF Strength Meter (8.0GHz)
--------	--------------------------------

480836 3.5GHz RF EMF Strength Meter



Radiation measurement in the 50MHz to 3.5GHz frequency range

- For electromagnetic field strength measurement of mobile phones, cell phone and base stations, microwave leakage
- Non-directional (isotropic) measurement with 3-channel (triaxial) measurement probe
- User selectable alarm threshold
- Max Hold and Average functions
- 1 year warranty
- Complete with 9V battery and carrying case

SPECIFICATIONS	RANGE
Frequency range	50MHz to 3.5GHz
Directional Characteristic	Isotropic, 3-dimensional
Measurement Ranges	20mV/m to 108 V/m 53µA/m to 286mA/m 1µW/m ² to 30.93mW/m ² 0µW/cm ² to 3.093mW/cm ²
Audible Alarm	Adjustable threshold with On/Off
Memory	Manual save/recall of 99 sets
Dimensions/Weight	2.4x2.4x9.3" (60x60x237mm)/ 7.1oz (200g)

ORDERING

480836	RF EMF Strength Meter (3.5GHz)
--------	--------------------------------

480826 Triple Axis EMF Tester



CE

Three axis (X,Y, Z) electromagnetic field measurement

- Designed to provide user a quick, reliable and easy way to measure EMF radiation levels around power lines, electrical appliances and industrial devices
- Wide ranges (3 ranges of μ Tesla or mGauss)
- Calibrated to measure EMF radiation at wide bandwidths from 30Hz to 300Hz
- Big digit LCD display with Data hold
- Easy to use remote probe
- 1 year warranty
- Complete with sensor with 3ft (930mm) cable, 9V battery, and hard carrying case

SPECIFICATIONS	RANGE	MAX. RESOLUTION	BASIC ACCURACY
μ Tesla	20 μ Tesla	0.01 μ Tesla	\pm 4%
	200 μ Tesla	0.1 μ Tesla	\pm 5%
	2000 μ Tesla	1 μ Tesla	\pm 10%
mGauss	200mGauss	0.1mGauss	\pm 4%
	2,000mGauss	1mGauss	\pm 5%
	20,000mGauss	10mGauss	\pm 10%
Number of Axis	3-axis X, Y, Z direction		
Bandwidth	30Hz to 300Hz		
Sampling Time	Approx. 0.4 second		
Power Current	Approx. DC 2.7mA		
Dimensions	2.6x1.2x 7.6" (68x30x195mm)		

ORDERING

480826	Triple Axis EMF Meter
--------	-----------------------

480823 EMF/ELF Meter



CE

Measure electromagnetic field radiation levels from fans, electrical appliances, wiring, and power lines

- ELF frequency bandwidth of 30 to 300Hz
Single axis - sampling 2.5 times per second
- Large 1/2" LCD (1999 count) display of Electromagnetic Field (EMF) level in milliGauss or microTesla
- Accurate measurements to 4% over a measuring range of 0.1 to 199.9mGauss (0.01 to 19.99 μ Tesla)
- Dims: 5.2x2.8x1" (132x71x25mm); Weight: 6oz (170g)
- 1 year warranty
- Complete with 9V battery

ORDERING

480823	Electromagnetic Field Meter
409992	Soft pouch carrying case

Forums • Chat • Videos • Live Events

**PLANET
EXTECH**



JOIN TODAY!

www.planetextech.com

Tough, Reliable and Accurate

Extech infrared thermometers provide non-contact, point-and-shoot temperature measurements ensuring safety and accuracy on the job. With unrivaled distance ratios, temperature ranges, and laser targeting options, Extech offers IR thermometers for every application.



IR100 446°F (230°C), 1:1, Mini IR Thermometer

Mini size design for the ultimate convenience and portability

- Measures non-contact surface temperature up to 446°F (230°C)
- Economical mini size design for convenience
- Automatic Data Hold when measure button is released
- Max Hold or Min Hold
- Lock feature for continuous scanning
- Fixed 0.95 emissivity covers 90% of surface applications
- Auto power off
- Complete with CR2032 3V battery



IR201 518°F (270°C), 6:1, Pocket Laser IR Thermometer

Handy troubleshooting thermometer with laser pointer

- Measures non-contact surface temperature up to 518°F (270°C)
- Adjustable high alarm
- Economical small pocket size design for convenience
- Built-in laser pointer identifies target area
- Data Hold and Min/Max Hold
- Lock mode for continuous scanning
- Auto power off
- Adjustable emissivity for better accuracy on different surfaces
- Complete with two AAA batteries and pouch case

IR Thermometers

Choose the best InfraRed Thermometer to fit your application needs by selecting the proper measurement range, field of view, resolution, and accuracy. Applications include industrial plant maintenance, HVAC/R, electrical contracting, boiler/steam systems, automotive, foodservice, laboratory, metallurgy and more.

SPECIFICATIONS	IR100	IR201 ^N
IR Temperature (Non-contact)	-34 to 446°F (-33 to 230°C)	-4 to 518°F (-20 to 270°C)
Basic Accuracy	±(2.5%rdg) or ±5°F/2.5°C	±(2.5%rdg±3°F/2°C)
Max. Resolution	0.1°F/°C	0.1°F/°C
Emissivity	0.95 fixed	0.10 to 1.0 adjustable
Field of view (Distance to Target)	1:1	6:1
CE approved	Yes	Yes
Dimensions	3x1.6x0.7" (75x40x18mm)	3.7x2x1" (94x51x25mm)
Weight	1.5oz (43g)	2.7oz (76g)
Warranty	1 year	1 year



42500 500°F (260°C), 6:1, Compact Laser IR Thermometer

Compact thermometer measures up to 500°F (260°C)

- Built-in laser pointer identifies target area
- Backlighting
- Automatic Data Hold when trigger released
- Fixed 0.95 emissivity covers 90% of surface applications
- Auto power off
- Complete with 9V battery and pouch case



IR400 630°F (332°C), 8:1, Compact Laser IR Thermometer

Compact thermometer measures up to 630°F (260°C) with MIN/MAX readings

- MAX/MIN features display highest and lowest values
- Built-in laser pointer identifies target area
- Backlighting
- Automatic Data Hold when trigger released
- Fixed 0.95 emissivity covers 90% of surface applications
- Auto power off
- MAX/MIN features display highest and lowest values
- Complete with 9V battery and pouch case



42510A 1200°F (650°C), 12:1, Compact Laser IR Thermometer

Compact thermometer measures up to 1200°F (650°C) with high accuracy

- Adjustable high/low visual and audible alarm
- Adjustable emissivity for better accuracy on different surfaces
- MAX/MIN features display highest and lowest values
- Built-in laser pointer identifies target area
- Backlighting
- Over-range indicator
- Automatic Data Hold when trigger released
- Auto power off
- Complete with 9V battery and pouch case

42500 N

-4 to 500°F (-20 to 260°C)
 ±2% of rdg or
 ±4°F/±2°C (whichever is greater)
 1°F/°C
 0.95 fixed
 6:1
 Yes
 3.2x1.7x6.7" (82x44x170mm)
 4.9oz (140g)
 3 years

IR400 N

-4 to 630°F (-20 to 332°C)
 ±2% of reading +4°F/2°C
 0.1°F/°C
 0.95 fixed
 8:1
 Yes
 3.2x1.6x6.3" (82x42x160mm)
 6.3oz (180g)
 1 year

42510A N

-58 to 1200°F (-50 to 650°C)
 ±(1% of reading + 2°F/1°C)
 0.1°F/°C; 1°F/°C
 0.1 to 1.00 Adjustable
 12:1
 Yes
 3.2x1.6x6.3" (82x42x160mm)
 6.4oz (180g)
 3 years

SPECIFICATIONS

IR Temperature (Non-contact)
 Basic Accuracy
 Max. Resolution
 Emissivity
 Field of view (Distance to Target)
 CE approved
 Dimensions
 Weight
 Warranty

Set Yourself Apart from the Competition

"I love the 42512's ability to adjust emissivity, proving to a client I am more accurate than the competition. The dual laser makes a visual measurement exact and it's very impressive to customers, giving me more credibility."

Norman D., Alberta, Canada



Display color changes indicating if reading is within range

42509 Dual Laser, 950°F (510°C), 12:1, IR Thermometer with Color Alert

Fast responding, programmable alarm with red or blue display and audible alarm

- Great for processes that require temperature control and monitoring
- Fast, accurate measurements at 12" where the two lasers converge with 12:1 field of view
- Blue backlit dual LCD display changes to Red when reading exceeds High or Low set points
- Fast 150 millisecond instantaneous response for capturing spikes in temperature
- Max Hold
- Lock function for continuous readings
- Adjustable emissivity
- Adjustable High/Low set points with audible alarm
- Double molded housing
- Complete with case and 9V battery



42512 Dual Laser, 1832°F (1000°C), 30:1, IR Thermometer

Fast response and accurate measurements

- Dual laser simplifies distance-to-target ratio—no more calculations!
- Accurate measurements at 30" distance
- Fast 150 millisecond instantaneous response for capturing spikes in temperature
- Max mode captures and holds rapidly changing temperatures
- Lock function for continuous readings
- White backlit dual LCD display
- Adjustable emissivity increases measurement accuracy for different surfaces
- Double molded housing
- Adjustable High/Low set points with audible alarm alerts user when temperature exceeds the programmed set points
- Complete with carrying case and 9V battery

SPECIFICATIONS	42509 ^N	42512 ^N
Range	-4 to 950°F (-20 to 510°C)	-58 to 1832°F (-50 to 1000°C)
Basic Accuracy	±(1% of rdg + 2°F/1°C)	±(1% of rdg + 2°F/1°C)
Repeatability	±0.5% or 1.8°F/1°C	±0.5% or 1.8°F/1°C
Max. Resolution	0.1°F/°C	0.1°F/°C
Emissivity	0.10 to 1.00 Adjustable	0.10 to 1.00 Adjustable
Field of View (Distance to Target)	12:1	30:1
CE approved	Yes	Yes
Dimensions/ Weight	5.7x4x1.6" (146x104x43mm)/ 5.7oz (163g)	5.7x4x1.6" (146x104x43mm)/ 5.7oz (163g)
Warranty	3 years	3 years



42515-T includes Type K Pipe Clamp Temperature probe

42515/42515-T 1472°F (800°C), 13:1, IR Thermometer Type K Input, Memory

Automatic Emissivity Adjustment allows accurate measurement of virtually any surface

- Wide temperature range for IR temperature and type K thermocouple measurements
- Automatic emissivity adjustment (for temperatures 212°F or higher)
- Stores up to 20 data points
- Adjustable high/low visual and audible alarm
- MAX/MIN/AVG/DIF display highest, lowest, average, and MAX minus MIN values
- LCD display with backlight
- Built-in laser pointer
- Data Hold, Auto power off, and Low battery indication
- **42515:** Includes 9V battery, general purpose type K bead wire probe, and soft case
- **42515-T:** Includes 42515 and TP200 pipe clamp temperature probe (-4 to 200°F/-20 to 93°C)

42540 1400°F (760°C), 16:1, with Alarm, IR Thermometer

16:1 distance to target ratio, rugged thermometer

- High Temperature range from -58° to 1400°F (-50 to 760°C)
- 16 to 1 distance to target ratio
- Adjustable high/low alarm alerts user visually and audibly when temperature exceeds programmed limits
- Adjustable emissivity for better accuracy on different surfaces
- MIN/MAX/AVG/DIF features display highest, lowest, average, and MAX minus MIN values
- Large backlit display
- Built-in laser pointer
- Automatic Data Hold
- Auto power off
- Complete with 9V battery and hard carrying case

42545 1832°F (1000°C), 50:1, with Alarm, IR Thermometer

50:1 distance to target ratio

- Highest 50 to 1 distance to target ratio measures smaller surface areas at greater distances
- Widest Temperature range from -58 to 1832°F (-50 to 1000°C)
- Adjustable high/low alarm alerts user visually and audibly when temperature exceeds programmed limits
- Adjustable emissivity for better accuracy on different surfaces
- MIN/MAX/AVG/DIF features display highest, lowest, average, and MAX minus MIN values
- Large backlit display
- Built-in laser pointer
- Automatic Data Hold
- Auto power off
- Complete with 9V battery and hard carrying case

■ 42515 N | ▲ 42515-T N

IR: -58 to 1472°F (50 to 800°C);
Type K: -58 to 2498°F (-50 to 1370°C)

IR: ±2%rdg or 4°F(2°C);
Type K: ±1.5%rdg + 2°F/1°C

±0.5% or ±1.8°F/1°C

0.1°F/°C

0.1 to 1.00 Adjustable

13:1

Yes

3.2 x 1.6 x 6.3" (82x42x160mm)/ 6.4oz (180g)

3 years

42540 N

-58 to 1400°F (-50 to 760°C)

±2%rdg or 4°F (2°C) whichever is
greater < 932°F (500°C); ±(2.5%rdg + 5°)>
932°F (500°C)

±0.5% or ±1.8°F/1°C

0.1°F/°C

0.1 to 1.00 Adjustable

16:1

Yes

3.9x2.2x9" (100x56x230mm)/ 10.2oz (290g)

3 years

42545 N

-58 to 1832°F (-50 to 1000°C)

2%rdg + 4°F/2°C < 932°F (500°C);
3% + 9°F/4°C > 932°F (500°C)

±0.5% or ±1.8°F/1°C

0.1°F/°C

0.1 to 1.00 Adjustable

50:1

Yes

3.9x2.2x9" (100x56x230mm)/ 10.2oz (290g)

3 years

SPECIFICATIONS

Range

Basic Accuracy

Repeatability

Max. Resolution

Emissivity

Field of View (Distance to Target)

CE approved

Dimensions/ Weight

Warranty

42570 High Temperature IR Thermometer



Fast, easy-to-use, dual laser pointer for non-contact temperature readings plus Type K input for contact Temperature

CE

Fast response (100mS) with highest accuracy at point where dual lasers converge plus Type K input and USB interface

- High 50:1 distance to target ratio measures smaller surface areas at greater distances
- Dual Laser Targeting indicates ideal measuring distance when two laser points converge to 1" target spot
- Fast 0.10 second response time
- Tripod mounting feature and Lock function for continuous measurements
- Stores up to 100 readings
- White backlit LCD with bargraph
- MAX/MIN/AVG/DIF functions
- Adjustable emissivity
- Adjustable High/Low set points with audible alarm
- Complete with general purpose Type K bead wire probe, USB cable and PC software, tripod, 9V battery and case; 3 year warranty (See p. 40, 41, and 74 for additional optional Type K Thermocouple probes)

SPECIFICATIONS

Laser Convergence Distance	50" (127cm)
IR Temperature Range	-58 to 3992°F (-50 to 2200°C)
Repeatability	±0.5% or 1.8°F/1°C
Basic Accuracy	±(1% of rdg + 2°F/1°C)
Max resolution	0.1°F/°C
Emissivity	0.10 to 1.00 Adjustable
Field of View (Distance to Target)	50:1
Type K Range	-58 to 2498°F (-50 to 1370°C)
Dimensions/ Weight	8x6.1x2" (204x155x52mm)/ 11.3oz (320g)

ORDERING

42570	N	50" Distance Dual Laser InfraRed Thermometer
-------	---	--

42560 IR Thermometer with Wireless PC Interface



Type K Thermometer

Continuous wireless data transfer to a PC

CE

Wireless USB interface transmits temperature data to a PC

- Place meter on the Base to wirelessly transmit continuous readings to the Remote Receiver connected to a PC via USB cable
- Built-in laser pointer and high 30:1 distance to target ratio
- Tripod mounting feature and Lock function for continuous measurements
- Stores up to 20 readings
- Manual/Automatic emissivity, MAX/MIN/AVG/DIF, and Type K temperature functions
- High/Low set points with audible alarms
- Data Hold, Auto power off with disable function, low battery indication, 1mV/°F analog output
- Complete with Transmitter Base, Remote Receiver with USB cable, general purpose Type K bead wire probe, tripod, analog output cable, PC software, 9V battery, AC adaptor, and hard case; 3 year warranty (See p. 40, 41, and 74 for additional optional Type K Thermocouple probes)

SPECIFICATIONS

IR Range	-58 to 1922°F (-50 to 1050°C)
Type K Range	-58 to 2498°F (-50 to 1370°C)
Repeatability	±0.5% or ±1.8°F/1°C
Basic Accuracy	IR: ±2% or ±4°F/2°C ; Type K: ±1.5% ±5°F/3°C
Max. Resolution	0.1°F/°C
Emissivity	0.1 to 1.00 Adjustable
Field of View (Distance to Target)	30:1
Dimensions/Weight	3.9x2.2x9" (100x56x230mm)/ 10.2oz (290g)

ORDERING

42560	N	IR Thermometer w/Wireless PC Interface (915MHz)
42560-E	N	IR Thermometer w/Wireless PC Interface (433MHz)

VIR50 Digital Laser Video IR Thermometer



Available Q4, 2011

2.2" Color TFT LCD and Built-in Camera with a microSD card for capturing images (JPEG) and video for viewing on your PC

- Dual laser indicates ideal measuring distance where the two laser points converge to a 1" target spot
- Fast 150 millisecond response time
- Color LED bargraph for viewing trends
- Body Temperature Function for quickly detecting elevated body (forehead) temperature
- Type K Thermocouple input
- Air Temperature and Relative Humidity measurement
- Adjustable emissivity increases measurement accuracy for different surfaces
- Adjustable High/Low set points with audible alarm alerts user when temperature exceeds the programmed set points
- MAX/MIN/AVG/DIF functions
- Trigger lock function for continuous readings
- USB interface
- Auto power off
- Double molded housing
- Complete with microSD card, general purpose Type K bead wire probe, USB cable, rechargeable 3.7V battery, and carrying case; 3 year warranty (See p. 40, 41, and 74 for additional optional Type K Thermocouple probes)

SPECIFICATIONS

Laser Convergence Distance	50" (127cm)
IR Temperature Range	-58 to 3992°F (-50 to 2200°C)
Repeatability	±0.5% or 1.8°F/1°C
Basic Accuracy	±(1% of rdg + 2°F/1°C)
Max resolution	0.1°F/°C
Emissivity	0.10 to 1.00 Adjustable
Field of View (Distance to Target)	50:1
Type K Temperature Range	-58 to 2498°F (-50 to 1370°C)
Air Temperature Range	32 to 122°F (0 to 50°C)
Relative Humidity	0 to 100%RH
Dimensions	7.4x6.0x2.2" (189x152x57mm)
Weight	17.4oz (494g)

ORDERING

VIR50 N	Dual Laser Video IR Thermometer
BATT-37V	Rechargeable 3.7V battery



Large 2.2" color video LCD displays measurement area with temperature/humidity, min/max/avg, date, and time stamp



Upload images and videos to a PC or laptop for further analysis or use for report documentation.

More Capabilities for Better Diagnostics

Our thermocouple thermometers deliver accurate temperature readings and easy, one-button Delta-T calculations. With high/low alarms, dual and triple displays, data functions, and datalogging, Extech expands your problem-solving capabilities.



TP882 Type K Penetration Probe



TP200/TP400 Pipe Clamp Probes

ACCESSORIES

TP200	Type K Clamp Probe (-4 to 200°F)
TP400	Type K High Temperature Clamp Probe (-4 to 450°F)
TP870	Type K Bead wire Probe (-40 to 482°F)
TP882	Type K Penetration Probe (-50 to 1000°F)
872502	Type J Bead Wire Probe (-328 to 392°F)
801515	Type J, 4" (100mm) General Purpose Temperature Probe (-328 to 842°F)
409996	Soft Vinyl Pouch Carrying Case (for EA15)

See p. 40-41 for additional temperature probes.



TM100 Type J/K Single Input Thermometer

Side-mounted controls allow for convenient one-handed operation

- Large backlit LCD display
- Wide temperature range with 0.1°/1° resolution
- Readout in °F, °C, or K (Kelvin)
- Data Hold function freezes reading on display
- Max/Min/Avg readings with relative time stamp
- Offset key used for zero function to make relative measurements
- Auto Power off with disable feature
- Complete with general purpose Type K bead wire temperature probe and 9V battery. (Optional temperature probes available on left accessories chart and pages 40-41)



TM300 Type J/K Dual Input Thermometer

Dual inputs allow for calculation of differential temperature readings

- Dual inputs and displays T1, T2, T1-T2 differential, plus Min, Max, Avg
- Side-mounted controls allow for convenient one-handed operation
- Large backlit LCD display
- Wide temperature range with 0.1°/1° resolution
- Readout in °F, °C, or K (Kelvin)
- Data Hold function freezes reading on display
- Max/Min/Avg readings with relative time stamp
- Offset key used for zero function to make relative measurements
- Auto Power off with disable feature
- Complete with two Type K bead wire temperature probes, three AAA batteries, and case. (Optional temperature probes available on left accessories chart and pages 40-41)

SPECIFICATIONS	TM100 N	TM300 N
Single or Dual Input	Single	Dual
Type K °F (°C)	-328 to 2501°F (-200 to 1372°C)	-328 to 2501°F (-200 to 1372°C)
Type J °F (°C)	-346 to 2012°F (-210 to 1100°C)	-346 to 2012°F (-210 to 1100°C)
Basic Accuracy	±0.15% rdg	±0.15% rdg
Resolution	0.1°/1°	0.1°/1°
Datalogging	—	—
CE approved	Yes	Yes
Dimensions	8.7x2.5x1.1" (220x 63 x 28mm)	8.7x2.5x1.1" (220x 63 x 28mm)
Weight	7oz (200g)	7oz (200g)
Warranty	1 year	1 year



EA11A EasyView® Type K Single Input Thermometer

Large dual LCD display with 0.3% accuracy and memory

- Simultaneously displays current temperature and Max/Min/Avg or stored memory location
- Selectable units of °F and °C
- Manually store/recall up to 150 readings
- Data Hold and Auto power off
- Records MAX /MIN/AVG readings for later recall
- Complete with built-in stand, protective holster, general purpose Type K bead wire probe, and 6 AAA batteries. (Optional temperature probes available on p. 40, 41, and 74)



EA10 EasyView® Type K Dual input Thermometer with Dual readings

Big backlit display with relative and elapsed time indication

- Displays [T1 and T2] or [T1-T2 and T1] or [T1-T2 and T2]
- Selectable units of °C/°F or Kelvin
- Timer function displays elapsed time plus the time when MAX/ MIN readings are taken
- OFFSET key used for zero function to make relative measurements
- Data hold and Auto power off
- Complete with built-in stand, protective holster, two general purpose Type K bead wire temperature probes, and 6 AAA batteries. (Optional temperature probes available on p. 40, 41, and 74)



EA15 EasyView® 7 Thermocouple Datalogger

Internal memory stores up to 8800 data sets

- Seven Thermocouple type selections: K, J, T, E, R, S, N
- Large backlit display
- Stores Time, T1 and T2
- Manual push-button datalogging or automatic with programmable sample rate of 3 to 355 seconds per reading
- Manual record/recall of data
- Data Hold and Auto power off
- MAX/MIN/AVG or MAX/MIN with elapsed time
- Complete with two general purpose Type K bead wire temperature probes, Windows® compatible software, RS-232 cable, protective holster, case, and 6 AAA batteries. (Optional temperature probes available on p. 40, 41, and 74)

EA11A N

Single
-58 to 1999°F (-50 to 1300°C)
—
±0.3% rdg
0.1°/1°
—
Yes
5.9x2.8x1.3" (150x72x35mm)
8.3oz (235g)
1 year

EA10 N

Dual
-200 to 1999°F (-200 to 1360°C)
—
±0.3% rdg
0.1°/1°
—
Yes
6x2.8x1.5" (152x72x37mm)
8.3oz (235g)
1 year

EA15 N

Dual
-200 to 1994°F (-150 to 1090°C)
-200 to 1999.9°F (-150 to 1370°C)
±0.05% rdg
0.1°
8800 readings
Yes
5.91x2.83x1.38" (150x72x35mm)
8.3oz (235g)
1 year

SPECIFICATIONS

Single or Dual Input
Type K °F (°C)
Type J °F (°C)
Basic Accuracy
Resolution
Datalogging
CE approved
Dimensions
Weight
Warranty

Track Temperature Trouble with Extech

Extech's thermocouple thermometers and dataloggers make it easier than ever to monitor and record up to 4 channels of temperature with easy to read displays and flexible datalogging options.



ACCESSORIES

TP200	Type K Clamp Probe (-4 to 200°F)
TP400	Type K High Temperature Clamp Probe (-4 to 450°F)
TP870	Type K Bead wire Probe (-40 to 482°F)
TP882	Type K Penetration Probe (-50 to 1000°F)
872502	Type J Bead Wire Probe (-328 to 392°F)
801515	Type J, 4" (100mm) General Purpose Temperature Probe (-328 to 842°F)
409997	Soft Vinyl Pouch Carrying Case (for 421502, 421509)
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

See p. 40, 41, and 74 for details and additional temperature probes.



421502 Type J/K, Dual Input Thermometer with Alarms

Dual J or K input with dual display, relative and programmable High/Low audible alarms

- Widest range with highest 0.05% accuracy
- Rugged design for field use
- Large dual LCD displays T1, T2 or T1-T2, plus Elapsed Time
- Differential temperature between Type J, Type K, or both Type J and K
- MIN/MAX/AVG readings
- Data Hold and Relative functions
- Programmable Hi/Lo audible alarms
- Complete with two general purpose Type K bead wire temperature probes, protective holster with stand, and 9V battery



421509 7 Thermocouple Datalogger with Alarm

Memory stores up to 16 data sets, 1024 maximum data capacity

- Seven Thermocouple type selections:
K, J, T, E, R, S, N
- Large backlit LCD with two secondary displays for simultaneous T1, T2, T1-T2, Time and advanced readouts
- T/C offset adjustment
- REC, MAX, MIN, MAX-MIN, AVG and °C/°F switchable
- Data Hold and Relative function
- Bi-directional RS-232 PC interface
- Programmable Hi/Lo alarm with Real time clock with calendar
- Auto power off with disable feature
- Complete with two general purpose Type-K bead wire temperature probes, Windows® 95/98/ME/NT/2000/XP compatible software, RS-232 cable, protective holster, and 9V battery

SPECIFICATIONS	421502 N	421509 N
Number of Inputs	Dual	Dual
Type K °F (°C)	-328 to 2498°F (-200 to 1370°C)	-328 to 2501°F (-200 to 1372°C)
Type J °F (°C)	-328 to 1922°F (-200 to 1050°C)	-346 to 2192°F (-210 to 1200°C)
InfraRed °F (°C)	—	—
Basic Accuracy	±0.05% rdg	±0.05% rdg
Max. Resolution	0.2°F/0.1°C	0.1°
Datalogging	—	—
PC Interface	—	—
CE approved	Yes	Yes
Dimensions/Weight	7.63x3.6x2.1" (192x91x53mm)/13oz (365g)	7.5x3.6x2.0" (192x91x53mm)/12.8oz (365g)
Warranty	1 year	1 year



HD200 Differential Thermometer Datalogger + IR

Automatically stores up to 18,000 readings and takes differential and non-contact surface temperature measurements

- Display [T1, T2, T3 (IR)] or [T1-T2] or [T1-T3] or [T2-T3]
- Records in a continuous mode up to 18,000 readings
- Differential displays for HVAC/ Superheat measurements
- Heavy duty double molded housing
- MAX/MIN/AVG and Data Hold
- USB port and PC software included
- Includes IR Thermometer probe (HD200-IR) with 8:1 distance to target ratio and Laser pointer
- Complete with two general purpose Type K bead wire temperature probes, IR probe, built-in stand, Windows® compatible software, USB cable, hard carrying case, and 9V battery



SD200 3-Channel Temperature Datalogger

Records data on an SD card in Excel® format for easy transfer to a PC for analysis

- Triple LCD simultaneously displays 3 Type-K Temperature channels
- Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Selectable data sampling rate: 5, 10, 30, 60, 120, 300, 600 seconds or Auto
- Complete with (6) AAA batteries, 2G SD card, Universal AC Adaptor, (3) Type-K bead temperature probes, and mounting bracket



SDL200 4-Channel Datalogging Thermometer

4-Channel datalogging with 6 Thermocouple types (J, K, E, T, R,S) and 2-Channel datalogging with Pt100Ω probes

- Displays [T1, T2, T3, T4] or [T1-T2]
- Datalogs up to 20M records using a 2G SD card
- User programmable sampling rate from 1 to 3600 seconds
- Records readings with real date and time stamp
- Manual store/recall of up to 99 records
- Min/Max and Data Hold functions
- Offset adjustment used for zero function to make relative measurements
- Auto Power off with disable
- Built-in RS-232 interface
- Complete with four general purpose Type K bead wire temperature probes, SD card, hard carrying case, and 6 AA batteries; Optional AC Adaptor 153117 or UA100-240

HD200 N

Dual + IR
-328 to 2501°F (-200 to 1372°C)
—
-22 to 1022°F (-30 to 550°C) with IR probe
±0.15%
0.1°/1°
18,000 readings
Yes
Yes
7.9x2.9x1.9" (201x75x50mm)/ 9.8oz (280g)
3 years

SD200 N

Triple
-58 to 2372°F (-100 to 1300°C)
—
±(0.5% + 1°F/ 0.5°C)
0.1°
20M readings using 2G SD memory card
Optional 407001 Software (see p. 106)
Yes
5.2x 3.1x1.3" (132x80x32mm)/10oz (285g)
1 year

SDL200 N

Quad
-148 to 2372°F (-100 to 1300°C)
-148 to 2192°F (-100 to 1200°C)
—
±0.4% rdg
0.1°/1°
20M readings using 2G SD memory card
Optional 407001 Software (see p. 106)
Yes
7.2x2.9x1.9" (182x73x48mm)/ 17.6oz (500g)
3 years

SPECIFICATIONS

Number of Inputs
Type K °F (°C)
Type J °F (°C)
InfraRed °F (°C)
Basic Accuracy
Resolution
Datalogging
PC Interface
CE approved
Dimensions
Warranty

RHT50 Humidity/Temperature/Pressure Datalogger



CE



Monitors Humidity, Temperature and Air Pressure levels in clean rooms, warehouses, storage rooms, freezers, shipping vans, and water damage restoration. USB connector easily plugs into a computer for data analysis

Records up to 10,000 readings of Humidity, Temperature and Pressure

- USB interface for easy set-up and data download
- Selectable data sampling rate from 1 minute to 18 hours
- User-programmable Min/Max alarm thresholds
- Manual and Programmable start modes
- Status Indication via Red/Yellow LED and Green LED
- Complete with 3.6V Lithium battery, mounting bracket, and Windows® compatible analysis software; 1 year warranty

SPECIFICATIONS	RANGE	MAX RESOLUTION	BASIC ACCURACY
Temperature	-40 to 158°F (-40 to 70°C)	0.1°F/°C	±1.8°F/ ±1.0°C
Humidity	0 to 100%RH	0.1%RH	±3.5%RH
Air Pressure	13.7 to 15.2psi, 950 to 1050hPa, 95 to 105kPa, 0.9 to 1.0bar	0.1	±0.25% FS
Datalogging interval	1 second to 18 hours		
Memory	10,000 points		
Dimensions/Weight	5.1x1.1x0.98" (130x30x25mm)/ 1oz (20g)		

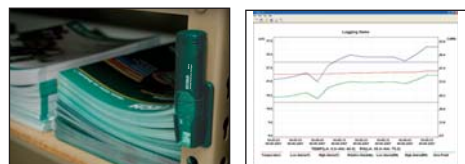
ORDERING

RHT50	Humidity/Temperature/Pressure Datalogger
42299	3.6V Lithium Battery (pk of 2)

RHT10/TH10 Humidity and Temperature USB Dataloggers



CE



Monitors Temperature and Humidity (RHT10) levels. USB connector easily plugs into a computer for data analysis using the included software

Two models to choose from with USB interface for easy data download

- **Model RHT10** datalogs 16,000 Temperature/ 16,000 RH readings; Dew point indication via Windows® compatible software; Optional RHT10-SW software for RHT10 to calculate Grains Per Pound (grams per kilogram) to 1120GPP (160g/kg)
- **Model TH10** datalogs 32,000 Temperature readings
- Selectable data sampling rate: 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr, 24hr
- User-programmable alarm thresholds for RH and Temperature
- Humidity: 0 to 100%RH (Model RHT10 only), Accuracy: ±3%RH; Temperature: -40 to 158°F (-40 to 70°C), Accuracy: ±1°F/0.5°C
- 1yr battery life; Dimensions: 5.1x1.1x0.9" (130x30x25mm)/Wt: 1oz (20g)
- Complete with 3.6V Lithium battery, protective USB cap, mounting bracket, and Windows® compatible software for analysis; 1 year warranty

ORDERING

RHT10	Humidity and Temperature USB Datalogger
RHT10-SW	GPP (g/kg) Software for RHT10
TH10	Temperature USB Datalogger

RHT20 Humidity and Temperature Datalogger



Monitors Humidity & Temperature levels in warehouse, storage rooms, freezers, shipping vans, and offices. USB connector easily plugs into a computer for data analysis.

CE

Datalogs 16,000 Humidity and 16,000 Temperature readings

- USB interface for easy setup and data download to a PC
- Dew point indication via Windows® compatible software (included)
- Selectable data sampling rate: 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr, 24hr
- User-programmable alarm thresholds for RH and Temperature
- LCD displays current readings, Min/Max, and alarm status
- Humidity: 0 to 100%RH, 0.1%RH resolution, Accuracy: ±3%RH; Temperature: -40 to 158°F (-40 to 70°C), 0.1°F/°C resolution, Accuracy: ±1.8°F/1°C
- 3 month battery life; Dimensions: 3.7x1.9x1.2" (94.4x48.9x31.2mm)/Wt: 3.2oz (90.7g)
- Complete with 3.6V Lithium battery, mounting bracket with combination lock, and Windows® compatible analysis software; 1 year warranty

ORDERING

RHT20	Humidity and Temperature Datalogger
-------	-------------------------------------

CALIBRATION TRACEABLE TO NIST

RH520A Humidity and Temperature Chart Recorder



LabView based PC software included



Best value graphical datalogger in the market that's easy to set up & operate

- Simultaneous numerical & graphical display of Humidity (10.0 to 95.0%) and Temperature (-20.0 to 140.0°F / -28.0 to 60.0°C) readings, plus Time and Date
- Basic Accuracy: $\pm 3\%$ Relative Humidity; $\pm 1.8^\circ\text{F}$ ($\pm 1^\circ\text{C}$)
- Includes LabView™-based software calculates and graphs Dew Point, Wet Bulb, and GPP (grains per pound)
- Large dual graphical LCD displays with adjustable vertical and horizontal resolution
- Internal memory records up to 49,000 data points and can be transferred to a PC
- Audible and visual alarm with Hi/Low setpoints
- Output socket used with optional external alarm module
- Dimensions: 5x7.7x0.9" (129x195x22mm); Weight: 12.6oz (357g)
- Complete with built-in stand, detachable probe with 3ft (1m) cable, RS-232 cable, RS-232 to USB adaptor, LabView-based PC software, 100-240VAC 50/60Hz adaptor, and 3 AA batteries; 1 year warranty

ORDERING

RH520A	N	Humidity+Temperature Chart Recorder (110V adaptor)
RH520A-220	N	Humidity+Temperature Chart Recorder (220V adaptor)
RH520A-240	N	Humidity+Temperature Chart Recorder (240V adaptor)
RH522		Replaceable Humidity/Temperature Probe
SL123		AC Alarm Relay Module 9ft (3m) cable
SL124		DC Alarm Relay Module 9ft (3m) cable

42280 Humidity and Temperature Datalogger



Records up to 16,000 readings with USB interface for downloading to a PC

- Programmable from keypad or PC, Selectable data sampling rate, and User programmable audible and visual alarms
- Measurement ranges: 0 to 100% RH and -4 to 144°F (-20 to 70°C); Resolution: 0.1%RH, 0.1°F/°C; Basic accuracy: $\pm 3\%$ RH, $\pm 1^\circ\text{F}$ / 0.6°C
- Dimensions/Weight: 4.75x3.5x1.5" (120.7x88.9x38.1mm)/ 5.7oz (163g)
- Complete with Windows® compatible software, USB cable, 110V AC adaptor, and four AA batteries; 1 year warranty

ORDERING

42280	Temperature and Humidity Datalogger
RH300-CAL	33% and 75%RH Calibration Kit

42265/42275 Humidity and Temperature Datalogger Kits



Compact, powerful and easy to use with PC interface

- **42265** Waterproof (IP65) Temperature (-40 to 185°F / -40 to 85°C) Datalogger Kit records up to 8000 readings
- **42275** Water resistant Humidity (0 to 100% RH) and Temperature (-40 to 185°F / -40 to 85°C) Datalogger Kit records up to 16,000 readings (8,000 readings/parameter)
- Resolutions: 0.1%RH, 0.1°F/°C; Basic accuracy: $\pm 3\%$ RH, $\pm 1^\circ\text{F}$ ($\pm 0.6^\circ\text{C}$)
- Real time clock with date and time and Logs data for days, weeks or months
- Three start methods: Scheduled, immediate or magnetic
- Multiple Dataloggers (42260 or 42270) can be programmed and data downloaded from one single docking station
- Programmable sampling rate from 1sec to 2hrs plus Hi/Lo limits with alarm indication
- 42265 or 42275 — 4.9x3.8x2" (123.8x95.3x51mm); 9oz (254g)
- 1 year warranty

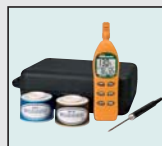
ORDERING

42275	Humidity/Temperature Datalogger Kit with PC Interface
42270	Humidity/Temperature Datalogger for 42275
42265	Temperature Datalogger Kit with PC Interface
42260	Temperature Datalogger for 42265
42299	Replacement 3.6V Lithium batteries (2pk)
USB100	RS-232 to USB Adaptor

Kits Include Windows® compatible software and docking station
 42265 — includes one 42260 datalogger.
 42275 — includes one 42270 datalogger.

Must-Have Tools for IAQ

Regulating humidity and temperature is a critical part of ensuring indoor air quality (IAQ) in residential, commercial offices, manufacturing and healthcare. Extech psychrometers are a key tool for rapid diagnostics and IAQ problem-solving.



RH305 kit



ACCESSORIES

RH300-CAL	33% and 75%RH Calibration Kit for RH300
RH350-CAL	33% and 75%RH Calibration Kit for RH350
TP890	Thermistor Temperature Probe for RH300
589250	RS-232 PC cable for RH350
USB100	RS-232 to USB Adaptor
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

RH300/RH305 Hygro-Thermometer Psychrometer

Temperature Probe for differential measurements

- Simultaneous display of %RH, Temperature and Dew Point or Wet Bulb or Probe Temperature
- Calculates T1-T2 differential (Air Temperature minus External Probe Temperature) using optional probe (TP890) and T2-Dew Point
- Data Hold and Auto power off
- MAX/MIN readings
- Optional TP890 probe for Differential Temperature
- **Model RH300** includes 2 AAA batteries
- **Model RH305** kit includes RH300, TP890 external temperature probe, RH300-CAL calibration bottles and carrying case

RH350 Dual Input Hygro-Thermometer Psychrometer

Two Type K External Probe inputs for Superheat plus memory

- Superheat differential measurements: T1-T2, Air-T1, and T1-Dew Point
- Backlit LCD displays 3 parameters: %RH and Temperature with either Dew Point, Wet Bulb or Type K
- RS232 interface – 407752 software available for download at www.extech.com and optional cable 589250 sold separately
- Stores up to 99 data points
- MAX/MIN with time stamp+AVG
- Data Hold, Auto power off
- Complete with 2 general purpose Type K bead wire probes, 4 AAA batteries

SPECIFICATIONS	■ RH300 <small>N</small> ▲ RH305 <small>N</small>	RH350 <small>N</small>
Sensor Type	Capacitance	Capacitance
Dew Point	-90.4 to 122°F (-68.0 to 49.9°C)	-90.4 to 122°F (-68.0 to 49.9°C)
Wet Bulb	-6.9 to 122°F (-21.6 to 49.9°C)	-6.9 to 122°F (-21.6 to 49.9°C)
Humidity (Basic Accuracy)	0 to 100%RH (±3%RH)	0 to 100%RH (±3%RH)
Mixing Ratio	—	—
Internal Temperature (Basic Accuracy)	-4 to 122°F /-20 to 50°C (±1.8°F/±1°C)	-4 to 122°F/-20 to 50°C (±1.8°F/±1°C)
External Temperature (Basic Accuracy)	Thermistor: -4 to 158°F/-20 to 70°C (±1.8°F or ±1°C)	Type K: -328 to 2498°F/-200 to 1370°C (±0.3% or 1.8°F or ±1°C)
IR Temperature (Basic Accuracy)	—	—
Emissivity	—	—
Field of View	—	—
PC Interface	—	Optional software & cable (589250)
Memory/Datalogging	—	99 readings
CE Approved	Yes	Yes
Dimensions/Weight	7x1.9x1" (178.5x48.4x24.7mm)/ 3.3oz (95g)	9x2.2x1.7" (230x57x44)/ 5.3oz (153g)
Warranty	1 year	1 year



RH390/RH490 Precision Hygro-Thermometer Psychrometers

Highest 2% RH accuracy with Fast 30 second Response Time

- Dual backlit display
- Simultaneous display of:
 - Humidity/Temperature
 - Humidity/Dew Point
 - Humidity/Wet Bulb
- Fast 30 second response time
- Slim design with rubberized sides for better grip and for one hand operation
- **Model RH490** measures Grains Per Pound (grams per kilogram) to 1120GPP (160g/kg)
- Complete with carrying case and 9V battery



HD500/HD550 Psychrometers + 30:1 InfraRed Thermometer

Combination Humidity Meter, Type K thermometer, and InfraRed Thermometer

- Built-in IR Thermometer for non-contact surface temperature measurements
- Type K Thermometer for contact temperature measurement
- Highest 2% RH accuracy
- Large triple LCD backlit display
- USB port includes PC software
- Auto power Off
- **Model HD550** measures Grains Per Pound (grams per kilogram) to 999GPP (160g/kg)
- Complete with general purpose Type K bead wire probe, PC software, USB cable, built-in stand, case, & 9V battery



SDL500 Hygro-Thermometer/Datalogger

Date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC

- Humidity, Temperature, Dew Point & Wet Bulb functions
- Selectable data sampling rate: 1 to 3600 seconds
- Manually store/recall up to 99 readings
- Large backlit dual LCD
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- Includes 6 x AA batteries, SD card, case and Humidity probe; Optional AC Adaptor 153117 or UA100-240, also see p. 40, 41, and 74 for optional Type K and J Thermocouple probes

■ RH390 **N** | ▲ RH490 **N**

Capacitance
-22 to 199°F (-30 to 100°C)
32 to 176°F (0 to 80°C)
0 to 100%RH (±2%RH)
■ No | ▲ 0 to 1120 GPP (grains per pound);
0 to 160 g/kg (grams per kilogram)

-22 to 199°F/-30 to 100°C (±1.8°F/1°C)
—
—
—
—
—
Yes
7.8x1.7x1.3" (200x45x33mm)/7oz (200g)
1 year

■ HD500 **N** | ▲ HD550 **N**

Capacitance
-90.4 to 140°F (-68 to 60°C)
-6.88 to 140°F (-21.6 to 60°C)
0 to 100% (±2%RH)
■ No | ▲ 0 to 999 GPP (grains per pound);
0 to 160 g/kg (grams per kilogram)

-14 to 140°F/-10 to 60°C (±4°F/±2°C)
Type K: -148 to 2501°F/-100 to 1372°C (±3%)
-58 to 932°F/-50 to 500°C (±2% or ±4°F/±2°C)
0.95 fixed
30:1
Yes
—
Yes
10x2.9x2" (255x75x50mm)/12.2oz (350g)
3 years

■ SDL500 **N**

Capacitance
-13.5 to 120.1°F (-25.3 to 48.9°C)
-6.9 to 122°F (-21.6 to 50°C)
5% to 95% (±3%RH)
—
32 to 122°F/0 to 50°C (±1.8°F/±1°C)
Type K: -148 to 2372°F/-100 to 1300°C
Type J: -148 to 2192°F/-100 to 1200°C
±(0.4% + 1.8°F/1°C)

—
—
Optional 407001 software (see p. 106)
20M readings using 2G SD memory card
Yes
7.2x2.9x1.9" (182X73X48mm)/23oz (655g)
3 years

SPECIFICATIONS

Sensor Type
Dew Point
Wet Bulb
Humidity (Basic Accuracy)
Mixing Ratio
Internal Temperature (Basic Accuracy)
External Temperature (Basic Accuracy)
IR Temperature (Basic Accuracy)
Emissivity
Field of View
PC Interface
Memory/Datalogging
CE approved
Dimensions/Weight
Warranty

Improve Indoor Air Quality with Extech

Accurately diagnosing problems related to barometric pressure, humidity and temperature levels is essential to effective HVAC/mechanical repair. Extech makes it easy with durable, accurate, and easy-to-use environmental meters.



ACCESSORIES

RH300-CAL	33% & 75% RH Calibration Kit for 445580
407752	Software and Cable for HT30
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)



445580 Humidity/Temperature Pen

Compact, Digital Hygro-Thermometer, ideal for field use

- Simultaneous display of Temperature (°C/°F) and Relative Humidity
- MAX/MIN and Data Hold
- Built-in self calibration utility allows for field calibrations using optional Relative Humidity calibration bottles (RH300-C)
- Complete with meter, pocket clip and 3V lithium battery



HT30 Heat Stress WBGT Meter

Wet Bulb Globe Temperature (WBGT) considers the effects of temperature, humidity and direct or radiant sunlight

- Heat Stress Index measures how hot it feels when humidity is combined with temperature, air movement, and radiant heat
- Black Globe Temperature (TG) monitors the effects of direct solar radiation on an exposed surface
- In/Out Function displays the WBGT value with or without direct sun exposure
- Auto power off with override
- Built-in RS-232 interface with optional PC software (407752)
- Complete with two AAA batteries

SPECIFICATIONS	445580 ^N	HT30 ^N
Sensor Type	Capacitance	Capacitance
Humidity	10 to 90%	0 to 100% RH
Dew Point	—	—
Temperature (Wet Bulb Globe)	—	32 to 122°F (0 to 50°C)
Temperature (Black Globe)	—	-32 to 176°F (-0 to 80°C)
Temperature (Air)	14 to 122°F (-10 to 50°C)	32 to 122°F (0 to 50°C)
Temperature (IR)	—	—
Barometric Pressure	—	—
Basic Accuracy	±5%, ±1.5°	±3%, ±1.1°F/0.6°C
Max. Resolution	0.1%, 0.8°	0.1%, 0.1°
PC Interface	—	Yes
Datalogging	—	—
CE approved	Yes	Yes
Dimensions	5.7x1.2x1" (145x30x25mm)/ 2.3oz (65g)	10x1.9x1.1" (254x49x30mm)/4.8oz (136g) Ball: 1.6" (40mm) dia, 1.4" (35mm) high
Warranty	1 year	1 year

Find Moisture Problems Fast

Extech offers moisture meters for a variety of industries. For wood and building trades, professionals use Extech pin and pin-less meters. For accurate soil testing as well as agricultural crop testing, trust Extech for specialized moisture meters.



ACCESSORIES

MO200-PINS	Replacement pins for MO210 (50 pins)
MO220-PINS	Replacement pins for MO220 (50 pins)
MO250-PINS	Replacement pins for MO250 (50 pins)
MO750-P	Replacement Moisture Probe for MO750
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)



MO210 Pocket Size Moisture Detector

Large dual graphical LCD displays moisture in wood and other building materials

- 2-in-1 Digital LCD readout and analog bargraph
- Measures Wood Moisture and Building Material Moisture
- Use on wall board, sheet rock, cardboard, plaster, concrete, and mortar
- Self-contained, pocket sized meter with belt clip
- Replaceable threaded measurement electrode pins
- Impact proof housing
- Auto power off conserves battery energy
- Built-in battery check and measurement verification test
- Complete with protective cap, replacement pins, and three CR-2032 button batteries



MO220 Wood Moisture Detector

Specifically designed for monitoring moisture in wood

- Memory contains 8 wood groups with calibrations for approximately 170 species of wood
- Measurements can be taken using the integral pin electrodes or a heavy duty remote probe (included)
- Automatically temperature compensated (ATC) readings when used with the temperature probe (included)
- Built-in calibration check
- Replaceable measurement electrode pins
- User adjustable Auto power off (1 to 9 minutes) with disable
- Low battery indication
- Includes remote moisture probe, Temperature probe, protective cap, replacement pins, pouch case, and 2 AA batteries

SPECIFICATIONS	MO210	MO220
Sensor Type	Contact Pins	Contact Pins
Moisture Content	6 to 44% (Wood); 0.2 to 2.0% (Materials)	6 to 44% (Wood)
Max. Resolution	1% (Wood) / 0.1% (Materials)	±1% (Wood)
Temperature (Air)	—	-31 to 176°F (-35 to 80°C)
Temperature (Type K)	—	—
Dew Point	—	—
PC Interface	—	—
Datalogging	—	—
CE approved	Yes	Yes
Dimensions	5.1x1.6x1.0" (130x40x25mm)	7x1.9x1.2" (180x50x31mm)
Weight	3.5oz (100g)	6.1oz (175g)
Warranty	1 year	1 year



NEW

M0257 Pinless Moisture Meter

Fast response pinless moisture readings on tiles, building materials and wood from depth of 0.78" to 1.6"

- Relative pinless moisture reading for non-invasive measurement
- Multifunction backlit triple LCD display
- Pinless measurement depth from 0.78" (20mm) to 1.6" (40mm) below the surface
- High frequency sensing technology
- Automatic Data Hold
- Two adjustable alarm levels with audible beeper and visual (flashing "RISK" or "WET") indicators
- Automatic calibration (in dry air) when meter is powered on
- Low battery indication
- Auto Power off
- Complete with 3 AA batteries and pouch case



M0750 Soil Moisture Meter

Integrated 8" (20cm) Heavy Duty Moisture Probe monitors the moisture level in soil

- Soil moisture content measurement from 0 to 50%
- Easy one-hand operation
- Min/Max records minimum and maximum moisture readings
- Data hold to freeze reading on display
- Water resistant housing
- Replaceable Heavy Duty Moisture Probe (M0750-P)
- Complete with moisture probe, 4 x AAA batteries and sensor cap



NEW

SDL550 Moisture Content Meter

23.7" (600mm) Heavy Duty Stainless Steel Probe measures moisture in Grain, Corn, Rice, Cotton, Paper, and other materials

- Measures Moisture Content, Air Temperature, Dew Point and Type J/K Temperature
- Moisture content measurement from 10 to 95%
- 1 sec sampling rate (approx.)
- Date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Dual display simultaneously displays Moisture Content and Temperature
- Min/Max and Data hold
- Auto power off with disable
- Built-in RS-232 interface
- Complete with Moisture Content Probe with 4.9ft (1.5m) cable, sensor cap, and 9V battery; Optional AC Adaptor 153117 or UA100-240, also see p. 40, 41, and 74 for optional Type K and J Thermocouple probes)

M0257	M0750	SDL550 N	SPECIFICATIONS
Pinless	Integrated Contact Probe	Stainless Steel	Sensor Type
0.0 to 100.0	0 to 50%	10 to 95%	Moisture Content
0.1	0.1%	0.1%	Max. Resolution
—	—	32 to 122°F (0.50°C)	Temperature (Air)
—	—	Type J: -148 to 2192°F (-100 to 1200°C) Type K: -148 to 2372°F (-100 to 1300°C)	Temperature (Type J/K)
—	—	-13.5 to 120.1°F (-25.3 to 49.9°C)	Dew Point
—	—	Optional 407001 software (see p. 106)	PC Interface
—	—	20M readings using 2G SD memory card	Datalogging
Yes	Yes	Yes	CE approved
9.25x2.5x1.1" (235x63x28mm)	14.7x1.6x1.6" (374x40x40mm)	Meter: 7.2x2.9x1.9" (182X73X48mm) Probe: 23.7" (600mm) x 0.4" (10mm) dia	Dimensions
7.7oz (218g)	9.4oz (267g)	Meter: 23.1oz (655g); Probe: 16.3oz (461g)	Weight
1 year	1 year	3 years	Warranty

Extech Redefines Moisture Meters

Extech's advanced moisture meters offer much more than moisture readings: Non-invasive, pin-less technology protects work surfaces. Environmental readings (RH, air and surface temperatures, dew point, GPP, vapor pressure, condensation levels) add extensive insight without extra meters. Remote specialty probes expand versatility. And available MeterLink™ technology transmits readings wirelessly to a FLIR infrared camera for accelerated diagnostics.



MO280 Pinless Moisture Meter

Non-invasive moisture content of building materials and wood

- Quickly indicates the moisture content of materials
- Select from 10 wood types and measurement ranges
- LCD displays % moisture of wood or material being tested
- Measurement depth to 0.75" (19mm) below the surface
- Automatic internal test and calibration
- Electro-magnetic testing technology
- Low battery indication
- Complete with 9V battery and pouch case



Optional 1m (EXT-1), 3m (EXT-3), or 5m (EXT-5) telescoping handle for MO265

ACCESSORIES

MO-P1	Replacement Moisture pin probe with 30" (76.2cm) cable and RJ45 Connector
MO100-PINS	20 Replacement pins
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)
Specialty Probes for MO265, MO290, & MO295 (see p. 89)	
MO290-EP	Extension Probe with 30" (76.2cm) cable and RJ45 connector. Includes 4 pins
MO290-HP	Hammer Probe with 30" (76.2cm) cable and RJ45 connector. Includes 4 pins (1.6"/4cm pin depth)
MO290-BP	Moisture Baseboard Probe (Dual fixed flat pins, 4.1"/10.5cm pin length), 30" (76.2cm) cable & RJ45 connector
Telescoping Handles for MO265	
EXT-1	4ft (1.2m) Telescoping Handle
EXT-3	9.8ft (3m) Telescoping Handle
EXT-5	16.4ft (5m) Telescoping Handle

SPECIFICATIONS

	MO280
Pinless Moisture	0 to 99% (limited by wood type)
Pin-type Moisture (remote probe)	—
Relative Humidity	—
Temperature (Air)	—
Temperature (IR)	—
Max Resolution	0.1%
Memory	—
CE approved	Yes
Dimensions/Weight	7.6x0.8x1.8" (192x30x45mm)/ 3.8oz (108g)
Warranty	1 year



Tri-color LED bargraph

M0260 Combination Pin/Pinless Moisture Meter

Monitor moisture in wood and other building materials with virtually no surface damage

- %WME (wood moisture equivalent) pin moisture reading
- Relative pinless moisture reading for non-invasive measurement
- Digital LCD readout with backlighting feature and tri-color LED bargraph
- Quickly indicates the moisture content of materials
- Pinless measurement depth to 0.75" (22mm) below the surface
- Electro-magnetic sensing technology
- Built-in calibration check
- Replaceable pins
- Low battery indication
- Cap protects pins during storage and can be snapped on to the side of the housing during use
- Complete with 9V battery, replacement pins, protective cap, and pouch case



M0265 Combination Pin/Pinless Moisture Meter with Remote Probe

Measure moisture in wood or other building materials with pinless or pin type technology

- Remote pin probe included to measure moisture in difficult to access areas
- %WME (wood moisture equivalent) pin moisture reading
- Relative pinless moisture reading for non-invasive measurement
- Digital LCD readout with backlighting feature and tri-color LED bargraph
- Quickly indicates the moisture content of materials
- Pinless measurement depth to 0.75" (22mm) below the surface
- Electro-magnetic sensing technology
- Built-in calibration check
- Replaceable pins
- Low battery indication
- Storage cap protects pins
- Optional Telescoping Handle extends to 4ft (1.2m), 9.8ft (3m), or 16.4ft (5m) for easy reach (see p. 86)
- Complete with 9V battery, pin probe replacement pins, protective cap, remote pin probe (MO-P1) and pouch case; (see p. 89 for specialty moisture probes)



Remote Pin probe included

M0290/M0295 Pinless Moisture Meters + IR Thermometer

Multi-parameter Moisture meters with built-in IR Thermometer

- Pinless measurement depth to 0.75" (19mm) below the surface
- Remote Pin probe measures moisture in hard to reach areas
- IR thermometer measures non-contact surface temperature; 8:1 distance to spot ratio with 0.95 fixed emissivity
- Programmable high/low Moisture and Humidity alarms
- Calculation of differential Temperature (IR - DP) to determine condensation point
- Min/Max, Data Hold, Auto power off and low battery indication
- Complete with pin moisture probe, 9V battery, and case; Optional Universal AC adaptor UA100-240. (See p. 89 for specialty moisture probes)

Model M0295 Additional Features

- Memory stores 20 readings
- Displays trending bargraph of moisture levels

M0260

0 to 99 (relative)
6.0 to 94.8% WME
—
—
—
0.1/0.1%
—
Yes
8x2.3x1.7" (203x58.4x43.2mm)/ 7.2oz (204g)
1 year

M0265

0 to 99 (relative)
6.0 to 94.8% WME
—
—
—
0.1/0.1%
—
Yes
8x2.3x1.7" (203x58.4x43.2mm)/ 7.2oz (204g)
1 year

M0290 N | M0295 N

0 to 99.9 (Relative)
0 to 99.9%
0 to 99.9% RH
-20 to 170°F (-29 to 77°C)
-4 to 392°F (-20 to 200°C)
0.1%, 0.1°F/°C
■ No ▲ 20 readings
Yes
6.5x2.8x1.5" (165x70x38mm)/ 7.4oz (210g)
1 year

MO270 Wireless Pin/Pinless Moisture Meter with METERLiNK™ /Bluetooth®



CE FC Available Q4 2011

Detachable pin/pinless sensors transmit data to the display that can be viewed from a remote location up to 65ft (20m)

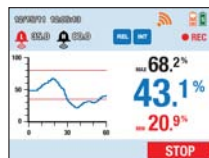
- Full color graphical display
- Display readings from 8 remote sensors on the meter's color LCD
- Receiver can record data from up to 40 remote sensors simultaneously on an SD card
- Trending Mode with graphical representation of live reading for fast scanning of large areas
- Wireless sensor affixes to telescoping handle (4ft/1.2m) for measurements in ceilings or in hard to reach areas; Optional 9.8ft (3m) and 16.4ft (5m) handles available
- Wirelessly transmits moisture and humidity data to your FLIR infrared camera's thermal image
- Use pinless technology for virtually no surface damage or traditional pin-type measurement for applications that require more accurate readings
- %WME (wood moisture equivalent) pin moisture reading
- Visual and audible High/Low alarm modes
- 2 point calibration check built into protective cap
- 1 year warranty
- Complete with 3.7V rechargeable Li-Polymer battery, wireless moisture sensor, external pin probe, replacement pins, telescoping handle (4ft/1.2m), AC adaptor, protective cap, 2G SD card, and hard case

SPECIFICATIONS

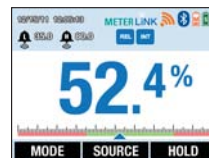
Pinless Range/ Depth	0 to 99.9 (relative)/ 0.75" (22mm)
Pin Range	6.0 to 99.9%
Transmission Frequency	2.4GHz (pin/pinless sensor to display)
Transmission Range	32ft (10m) unobstructed view
Dimensions/ Weight	8x2.3x1.7" (203x58.4x43.2mm)/ 7.2oz (204g)

ORDERING (SEE P. 89 FOR SPECIALTY MOISTURE PROBES)

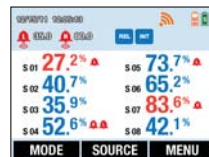
MO270	Combination Pin/Pinless Moisture Meter and wireless sensor
MO270-X	Optional Wireless Moisture Sensor
EXT-1	4ft (1.2m) Telescoping Handle
EXT-3	9.8ft (3m) Telescoping Handle
EXT-5	16.4ft (5m) Telescoping Handle
MO100-PINS	20 Replacement Pins



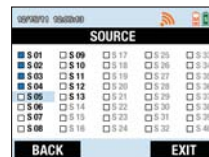
Trend Mode Display



Measurement Mode



Multi-Sensor Mode



Sensor Selection Menu



Wirelessly transmits moisture and humidity data to your FLIR infrared camera to incorporate meter readings with thermal images

MO297 Pinless Moisture Meter + IR Thermometer and METERLiNK™ /BlueTooth®



NEW

METERLiNK
Bluetooth



Communicates with
FLIR Thermal Imagers



Wirelessly transmits moisture and humidity data to your FLIR infrared camera's thermal image

- Measures moisture content of multiple wood types and building materials with Pinless technology without damaging the surface; Remote Pin-type probe (included) allows for contact moisture readings (3ft/0.9m cable length)
- Wireless communication with FLIR Thermal Imaging Cameras (model specific)
- Pinless measurement depth to 0.75" (19mm) below the surface
- Manually store/recall up to 20 labeled readings
- Large dual display with automatic backlight feature and Fast Analog Bargraph
- Simultaneously displays moisture plus Air Temperature, IR Temperature, or Humidity
- Programmable high/low Moisture/Humidity alarms
- Built-in IR Thermometer measures non-contact surface temperature
- Built-in probe measures Relative Humidity, Air Temperature plus Grains Per Pound (GPP)/(g/kg), Dew Point (DP), Vapor Pressure, and condensation point
- Calculation of differential Temperature (IR - DP) to determine condensation point
- Min/Max, Data Hold, and Auto power off
- 1 year warranty
- Complete with pin moisture probe with cable, 9V battery and pouch case

SPECIFICATIONS

Pinless Moisture (Non-Penetrating)	0 to 99.9 (Relative); Depth up to 0.75" (19mm)
Pin-type Moisture (probe included)	0 to 99.9%
Max Resolution	0.1, 0.1°F/°C
Humidity	0 to 100%RH
Temperature (Air) / (InfraRed)	Air: -20 to 170°F (-29 to 77°C)/ IR: -4 to 392°F (-20 to 200°C)
Vapor Pressure	0 to 20.0kPA
Dew Point	-22 to 199°F (-30 to 100°C)
Mixing ratio	0 to 999GPP (0 to 160g/kg)
Field of View	8:1 Distance to Target ratio
Emissivity	0.95 fixed
Dimensions/Weight	6.5x2.8x1.5" (165x70x38)/7.4oz (210g)

ORDERING

MO297	Pinless Moisture Meter+IR Thermometer with METERLiNK™/BlueTooth®
UA100-240	Universal AC Adaptor (100-240V)
See below for specialty Moisture Probes	



Measure moisture with non-invasive pinless technology or with remote pin probe and non-contact surface temperature with built-in IR Thermometer

Moisture Probes and Pins



MO-P1



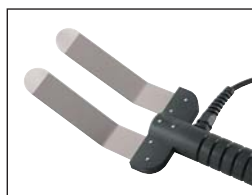
MO290-HP



MO290-EP



MO290-EXT



MO290-BP

Penetrating Moisture Probes for use with select Extech Moisture Meters

- Specialty Moisture probes with RJ45 connector compatible with Extech Moisture Meters MO265, MO270, MO290, MO295, and MO297

ORDERING

MO-P1	Moisture pin probe with 30" (76.2cm) cable and RJ45 Connector
MO290-BP	Moisture Baseboard Probe (Dual fixed flat pins with 4.1"/10.5cm pin length) with 30" cable
MO290-EP	Extension Probe for Model MO290/295 Moisture Meter with 30" (76.2cm) cable and 4 pins
MO290-PINS-EP	12 Replacement pins (6) 3.5"/8.9cm & (6) 6.5"/16.5cm pin depth) and 2 lock nuts for MO290-EP probe
MO290-EXT	11.8" (30cm) Extenders (set of 2) for MO290-EP probe
MO290-HP	Hammer Probe for Model MO290/295 Moisture Meter includes 4 pins (1.6"/4cm pin depth)
MO290-PINS-HP	20 Replacement pins (1.6"/4cm pin depth), 2 lock nuts for MO290-HP probe
MO220-PINS	50 Replacement pins (0.4"/1cm pin depth) for MO290-P probe

MO290-RK Water Restoration Contractor Kit



Special Value Kit

A complete solution for the Restoration Contractor

- Use combination moisture meter/thermal hygrometer to capture all ambient conditions as well as moisture levels in one meter. Includes essential probes to measure moisture levels under baseboards, in between walls, and in hard wood and plywood subfloors. Use USB Humidity/ Temperature datalogger for GPP calculations
- Kit includes: MO290, Pin Probe, Hammer Probe, Deep Wall Probe, and Baseboard Probe for contact moisture readings (see p. 89 for details)
- Supplied in a rugged hard carrying case
- **Model MO290** Pinless Moisture Psychrometer + IR Thermometer monitors moisture in wood and building materials with no surface damage. Built-in IR Thermometer for non-contact temperature; Fixed probe measures Air Temperature, RH, Grains Per Pound (GPP), Dew Point (DP), & Vapor Pressure (see p. 87)
- **Model RHT10/RHT10-SW** Humidity/Temperature USB Datalogger + GPP (g/kg) Calculation datalogs 16,000 data (RH and Temperature) USB interface and software included (see p. 78).

ORDERING

MO290-RK	Water Restoration Contractor Kit
----------	----------------------------------

MO260-RK Restoration Kit



NEW

Special Value Kit

Diagnose the amount of moisture content in buildings and measure accurate Humidity readings of ambient room conditions and GPP calculations

- Kit includes MO260 and RH490 meters and is supplied in a hard carrying case that provides protection and organization for the meters and accessories whenever they are needed
- **Model MO260** Combination Pin/Pinless Moisture Meter monitors moisture in wood and other building material with virtually no surface damage (see p. 87 for details)
- **Model RH490** Precision Hygro-Thermometer measures Temperature, Humidity, Dew Point, Wet Bulb, and Mixing Ratio in GPP (grains per pound/grains per kilogram) - (see p. 81 for details)

ORDERING

MO260-RK	Restoration Kit
----------	-----------------

MO280-RK Restoration Contractor's Kit



Special Value Kit

A complete solution for the Restoration Contractor

- Use pin and pinless meters to better diagnose the amount of moisture content. Thermal Hygrometer provides fast, accurate readings of ambient room conditions and GPP (g/kg) calculations
- Supplied in a rugged hard carrying case
- **Model MO280** Pinless Moisture Meter displays 0 to 99% moisture (select from 10 wood types). Measurement surface depth to 0.75" (22mm) with virtually no surface damage (see p. 86).
- **Model MO220** Wood Moisture Meter with integral pins or remote pin probe displays 6 to 99.9% moisture level (8 wood types with calibrations for approx. 170 species of wood) (see p. 84).
- **Model RH490** Precision Hygro-Thermometer with 2%RH accuracy and fast 30sec RH response time. Measures Humidity, Temperature, Dew Point, Wet Bulb, GPP and g/kg (see p. 81).
- **Model RHT10/RHT10-SW** Humidity/Temperature USB Datalogger + GPP (g/kg) Calculation datalogs 16,000 data (RH and Temperature). USB interface and software included (see p. 78).

ORDERING

MO280-RK	Restoration Contractor's Kit
----------	------------------------------

MO290-EK Environmental Test Kit



NEW

Special Value Kit

Specifically designed for Energy and Weatherization Auditors

- Helps monitor airflow, moisture levels, and provides inspection equipment to find energy loss in hard to see places
- Supplied in a rugged hard carrying case
- **Model MO290** Pinless Moisture Psychrometer + IR Thermometer monitors moisture in wood and building materials with no surface damage. Built-in IR Thermometer for non-contact temperature; Fixed probe measures Air Temperature, RH, Grains Per Pound (GPP), Dew Point (DP), & Vapor Pressure (see p. 87)
- **Model AN200** CFM/CMM Thermo-Anemometer + IR designed with large backlit LCD to display Airflow or Air velocity reading plus built-in IR Thermometer for non-contact temperature measurements (see p. 96)
- **Model CO250** Indoor Air Quality CO₂ Meter measures Carbon Dioxide, Temperature, Humidity, Dew Point and Wet Bulb and calculates statistical 8hr and 15 minute time weighted averages. RS-232 interface, data acquisition software and cable included to analyze data on your PC (see p. 102)
- **Model BR200** Video Borescope/Wireless Inspection Camera with 17mm camera and 39" (1m) waterproof (IP67) flexible gooseneck. Wireless 3.5" Color Monitor can be viewed from up to 32ft (10m) from the measurement point. MicroSD memory card included for storing images (JPEG) or video (AVI) to view on your PC (see p. 124)

ORDERING

MO290-EK	Environmental Kit
----------	-------------------

MO280-KH Home Inspector Kits



Special Value Kit

Aids in identification of moisture, HVAC, electrical & hot water system issues

- Specifically designed for home inspection professionals
- Supplied in an attractive storage case
- Dims: 9.5x6.8x2.8" (241x173x71mm); Wt: 1.8lbs (0.7kg)
- **Model MO280** Pinless Moisture Meter displays 0 to 99% moisture (select from 10 wood types). Measurement surface depth to 0.75" with virtually no surface damage (see p. 86).
- **Model 42500** IR Thermometer for testing HVAC system. Measures from -4 to 500°F (-20 to 260°C) (see p. 69)
- **Model ET10** GFCI Receptacle Tester tests for faulty wiring in 3 wire receptacle and GFCI Circuits and detects 5 wiring faults (not included in MO280-KH2 kit)
- **Model 39240** Waterproof Stem Thermometer for testing hot water heaters. Measures temperature from -40 to 392°F (-40 to 200°C) (see p. 45)

ORDERING

MO280-KH	Home Inspector Kit
MO280-KH2	Home Inspector Kit

MO280-KW Water Damage Restoration Kit



Special Value Kit

To monitor job site conditions, progress, and insurance company reporting

- Specifically designed for water damage restoration contractors
- Supplied in an attractive storage case
- Dims: 9.5x6.8x2.8" (241x173x71mm); Wt: 1.8lbs (0.7kg)
- **Model MO280** Pinless Moisture Meter displays 0 to 99% moisture (select from 10 wood types). Measurement surface depth to 0.75" (22mm) with virtually no surface damage (see p. 86).
- **Model RH490** Precision Hygro-Thermometer with 2%RH accuracy and fast 30sec RH response time. Measures Humidity, Temperature, Dew Point, Wet Bulb, GPP and g/kg (see p. 81).
- **Model MO210** Pocket Moisture Meter measures moisture of wood or other building materials displaying both digital and graphical readings (see p. 84).

ORDERING

MO280-KW	Water Damage Restoration Kit
----------	------------------------------

445703 Big Digit Hygro-Thermometer



CE

1" Digits on large dual LCD display for easy viewing

- Simultaneous display of Temperature (14 to 140°F/-10 to 60°C) and Humidity (10 to 99% RH)
- Max resolution: 0.1°, 1%; Basic Accuracy: $\pm 1.8^\circ\text{F}/1^\circ\text{C}$ and $\pm 5\% \text{RH}$
- MAX/MIN with reset function
- Dimensions: 4.3x3.9x0.78" (109x99x20mm); Weight: 6oz (169g)
- 1 year warranty
- Complete with stand, wall mounting bracket, and 1 AAA battery

ORDERING

445703	Big Digit Hygro-Thermometer
--------	-----------------------------

445715 Big Digit Remote Probe Hygro-Thermometer



CE

Calibration traceable to NIST available

- Probe clips onto meter or extends on 18" (457mm) cable
- Large dual LCD simultaneously displays Temperature (14 to 140°F/-10 to 60°C) and Humidity (10 to 99% RH)
- Max resolution: 0.1°, 1%; Basic Accuracy: $\pm 1.8^\circ\text{F}/1^\circ\text{C}$ and $\pm 5\% \text{RH}$
- MAX/MIN with reset function
- Rear calibration adjustment pot
- Dimensions: 4.3x3.9x0.78" (109x99x20mm); Weight: 6oz (169g)
- 1 year warranty
- Complete with built-in stand, wall mount bracket, sensor and AAA battery; optional calibration salt bottles (RH300-CAL)
- Optional Limited NIST 445715-NISTL includes certificate of Traceability to NIST at 75%. For Certificate of Traceability to NIST at 2 points (33% and 75%), order 445715-NIST (see p. 144 for ordering information)

ORDERING

445715	N	Big Digit Remote Probe Hygro-Thermometer
RH300-CAL		33% & 75% RH Calibration Kit

445814/445815 Humidity Alerts



CE

Programmable Alarm warns when Humidity level is too high or too low

- %RH audible and visual alarm alerts when humidity is higher or lower than HI/LO set points
- Simultaneous display of Temperature (14 to 140°F/-10 to 60°C) and Humidity (10 to 99% RH)
- Max resolution: 0.1°, 1%; Basic Accuracy: $\pm 1.8^\circ\text{F}/1^\circ\text{C}$ and $\pm 4\% \text{RH}$
- Displays Dew Point temperature
- Max/Min with reset function
- Rear calibration adjustment pot for Humidity and Temperature
- Warns when conditions for mold growth exist (bad for health) or air too dry (static)
- Dimensions: 4.3x3.9x0.78" (109x99x20mm); Weight: 6oz (169g)
- 1 year warranty
- Complete with built-in stand, wall mount bracket, sensor and one AAA battery; optional calibration salt bottles (RH300-CAL)
- **Model 445814** is designed with built-in Humidity and Temperature sensor
- **Model 445815** includes remote probe with 18" (457mm) cable and probe clip on side of meter and offers certificate of calibration traceable to NIST)
- Optional Limited NIST 445815-NISTL includes Certificate of Traceability to NIST at 75%. For Certificate of Traceability to NIST at 2 points (33% and 75%), order 445815-NIST (see p. 144 for ordering information)

ORDERING

445814		Humidity Alert
445815	N	Humidity Alert II
RH300-CAL		33% & 75% RH Calibration Kit



445702 Hygro-Thermometer Clock



CE

Combines three displays for Time, Temperature, and Humidity

- Clock display 12/24 hour time
- MAX/MIN with “reset” function
- Simultaneous display of Time, Temperature (14 to 140°F/-10 to 60°C) and Humidity (10 to 85% RH)
- Max resolution: 0.1°, 1%
- Basic Accuracy: ±1.8°F/1°C and ±6%RH
- Temperature is °C/°F switchable
- Programmable clock alarm
- Dimensions: 4.3x2.8x0.8" (109x71x20mm); Weight: 4oz (113g)
- 1 year warranty
- Complete with stand, wall mounting bracket, and one AAA battery

ORDERING

445702	Hygro-Thermometer Clock
--------	-------------------------

44550 Humidity and Temperature Pen



CE

Pocket size for quick and reliable measurements at any location

- Built-in sensors provide simultaneous readings of Relative Humidity (20 to 90%) and Temperature (14 to 122°F/-10 to 50°C) on dual LCD
- Max resolution: 1°, 1%
- Basic Accuracy: ±2°F/1°C and ±5%RH
- Temperature is °C/°F switchable
- Max/Min memory functions for display of highest and lowest readings for both Temperature & Relative Humidity
- “Clear” function key to erase stored Max/Min readings to record new values
- Dimensions: 5.9x0.8x0.7" (150x20x18mm); Weight: 0.7oz (20g)
- 1 year warranty
- Complete with pocket clip and one LR44 button battery

ORDERING

44550	Humidity and Temperature Pen
-------	------------------------------

WTH100 Radio Controlled Wireless Clock with Weather Station



Bright backlit display

CE

Receives Time Code from NIST Radio Station WWVB (North America only) and automatically adjusts time, date, and DST

- Large backlit LCD displays Time, Temperature, Barometric Pressure, Weather Symbols (sunny, slightly cloudy, cloudy, rainy, stormy) and Moon phase
- Temperature range: 32 to 113°F (0 to 45°C)
Barometric Pressure: 850mbar to 1050mbar
- Basic accuracy: ±2°F/1°C
- Selectable barometric pressure in mb/hPa or inHg
- Automatically adjusts for daylight savings time (DST)
- Days of the Week displayed in 5 selectable languages: English/German/French/Italian/Spanish
- Accuracy of 1 second per day
- Alarm Clock with snooze
- °F/°C switchable
- Dimensions: 3.1x1.9x3.9" (79x49x99mm); Weight: 6.7oz (191g)
- 1 year warranty
- Complete with built-in stand, and two AAA batteries

ORDERING

WTH100	Radio Controlled Wireless Clock with Weather Station
--------	--

Go Beyond Airflow Measurements

Extech's compact thermo-anemometers and multi-function environmental meters couple all-in-one versatility with accurate diagnostics. From solving HVAC problems to ensuring workplace safety compliance, Extech helps you get results with fewer tools.



ACCESSORIES

45116	Mini Impeller (2pk) for 45118
45156	Mini Impeller (2pk) for 45158
TR100	Tripod
CA895	Small Vinyl Pouch Case for 45118, 45158
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)



45118 Mini Thermo-Anemometer

Waterproof pocket size with Air Velocity, Temperature and Windchill

- Display Air Velocity and Temperature or Windchill
- Adjustable averaging function of 5, 10, or 13 second intervals
- Fold up protective housing extends to 9" (229mm) for better reach
- Tripod mount (optional TR100 Tripod — sold separately)
- Data Hold with Auto power off
- Water resistant housing floats
- Replaceable plastic vane 45116
- Complete with CR2032 lithium battery and 43" (1.09m) lanyard



45158 Mini Thermo-Anemometer+ Humidity

Waterproof pocket size with Air Velocity, Temperature, %RH, Dew Point & Windchill

- Display air velocity and either Relative Humidity, Dew Point, Temperature or Windchill
- Adjustable averaging function of 5, 10, or 13 second intervals
- Fold up housing extends to 9" (229mm) for better reach
- Tripod mount (optional TR100 Tripod — sold separately)
- Data Hold with Auto power off
- Water resistant housing floats
- Replaceable plastic vane 45156
- Complete with CR2032 lithium battery and 43" (1.09m) lanyard

SPECIFICATIONS	45118	45158
ft/min (res.)	100 to 5500 (20)	100 to 5500 (20)
m/s (res.)	0.5 to 28 (0.1)	0.5 to 28 (0.1)
km/h (res.)	1.8 to 100.6 (0.7)	1.8 to 100.6 (0.7)
MPH (res.)	1.1 to 62.5 (0.2)	1.1 to 62.5 (0.2)
knots (res.)	1.0 to 54.3 (0.3)	1.0 to 54.3 (0.3)
Beaufort Force (res.)	1 to 17 (1)	1 to 17 (1)
Temperature & Windchill °F/°C	0 to 122°F (0.1), -18 to 50°C (0.1)	0 to 122°F (0.1), -18 to 50°C (0.1)
Relative Humidity (res.)	—	10% to 95% (1%)
Foot Candles/Lux (res.)	—	—
Sound Level (res.) - A weighting	—	—
Basic Accuracy		
Airflow	±3% of reading	±3% of reading
Temperature	±1.8°F, ±1°C	±1.8°F, ±1°C
Relative Humidity	—	±5%RH
Light	—	—
Sound	—	—
PC Interface	—	—
CE approved	Yes	Yes
Dimensions/Weight	5.25x2.75x0.75" (133x70x19mm)/ 3oz (95g)	5.25x2.75x0.75" (133x70x19mm)/ 3oz (95g)
	Vane: 1" (26mm)D	Vane: 1" (26mm)D
Warranty	1 year	1 year



45160/45170 Environmental Meters

Measures Humidity, Temperature, and Airflow plus Light Level

- Built-in low friction vane wheel improves air velocity accuracy
- Type K input (Probe sold separately - see p. 40, 41, & 74)
- MAX/MIN and Data hold
- Thin-film capacitance humidity sensor for fast response
- Complete with wrist strap and 9V battery

45170 Additional Features

- Utilizes precision photo diode and spectral response filter for Cosine and color corrected measurement
- Auto-rotating display depending on function



EN300 Environmental Meter

Measures Humidity, Temperature, Air Velocity, Light, and Sound

- Auto-rotating display depending on function
- Built-in low friction vane wheel improves air velocity accuracy
- Thin-film capacitance humidity sensor built-in for fast response
- Thermistor for ambient temperature and Type K input for taking surface temperature
- Utilizes precision photo diode and correction filter
- Sound Level measurement meets IEC 61672 class 2
- MAX/MIN and Data hold
- Complete with 6 AAA batteries; Optional AC adaptor UA100-240



AN400 Cup Thermo- Anemometer

Rotating cups provide accurate air velocity measurements from any direction

- Wide range air velocity measures m/s, ft/min, km/hr, and knots
- Dual LCD digital display of Air Velocity and Temperature
- Record MAX/MIN values
- Record up to 100 readings
- Water resistant housing (IP65)
- Complete with four AAA batteries

■ 45160 | ▲ 45170

80 to 5910 (10)
0.4 to 30 (0.1)
1.4 to 108.0 (0.1)
0.9 to 67.0 (0.1)
0.8 to 58.3 (0.1)
—
32 to 122°F (0.1), 0 to 50°C (0.1)
10 to 95% (0.1%)
■ No
▲ 0 to 1860Fc (0.1Fc)/0 to 20,000Lux (1Lux)
—

±3% FS
±2.5°F, ±1.2°C
±4%RH
■ No | ▲ ±5% of reading

—
—
Yes
6.1x2.4x1.3" (156x60x33mm)/ 5oz (160g)
Vane: 1.2" (30.5mm)D
1 year

EN300

80 to 5910 (1)
0.4 to 30 (0.1)
1.4 to 108.0 (0.1)
0.9 to 67.0 (0.1)
0.8 to 58.3 (0.1)
—
32 to 122°F (0.1), 0 to 50°C (0.1)
10 to 95% (0.1%)
0 to 1860Fc (0.1Fc)/ 0 to 20,000Lux (1Lux)
35 to 130dB (0.1dB)

±3% FS
±2.5°F, ±1.2°C
±4%RH
±5% of reading
±1.4dB

Optional 407001 Software (see p. 106)
Yes
6.1x2.4x1.3" (156x60x33mm)/ 5oz (160g)
Vane: 1.2" (30.5mm)D
1 year

AN400

144 to 6895 (1)
0.9 to 35.0 (0.1)
2.5 to 126.0 (0.1)
1.6 to 78.2 (0.1)
1.4 to 68.0 (0.1)
—
32 to 122°F (0.1), 0 to 50°C (0.1)
—
—

Basic Accuracy
±2% of reading
±1.5°F, ±0.8°C

—
—
Yes
7.5x1.6x1.3" (190x40x32mm)/ 6.3oz (181g)
Vane: 2.9" (70mm)D
1 year

SPECIFICATIONS

ft/min (res.)
m/s (res.)
km/h (res.)
MPH (res.)
knots (res.)
Beaufort Force (res.)
Temperature & Windchill °F/°C
Relative Humidity (res.)
Foot Candles/Lux (res.)

Sound Level (res) - A weighting
Basic Accuracy
Airflow
Temperature
Relative Humidity
Light
Sound

PC Interface
CE approved
Dimensions/Weight
Warranty

Versatile and Durable Tools for HVAC/R

Extech equips HVAC/R professionals with rugged, accurate tools for measuring airflow, air velocity and air/surface temperatures. Extech's thermo-anemometers are available with vane/propeller probes as well as telescoping, hot-wire probes for small openings or hard-to-reach areas.



AN100/AN200 CFM/CMM Thermo-Anemometers

Large backlit display of Airflow or Air Velocity plus model with built-in InfraRed Thermometer

- Simultaneous display of Ambient Temperature and Air Flow or Air Velocity
- Up to 8 easy to set Area dimensions stored in internal memory (ft² or m²)
- 20 point AVG for Air Flow
- Low friction 2.83"D (72mm) ball bearing vane wheel
- Data Hold, MIN/MAX, Auto off
- Complete with vane sensor on 3.9ft (120cm) cable, 9V battery, protective rubber holster, and case
- **Model AN200** also features built-in IR Thermometer



HD300 CFM/CMM Thermo-Anemometer + IR Thermometer

Built-in IR Thermometer for quick troubleshooting of ceiling vents, duct work, and other remote surfaces

- IR Thermometer has 30:1 distance to target ratio and Laser pointer
- Simultaneous display of Air Flow in CFM/CMM or Air Velocity Plus Ambient Temperature
- Up to 8 easy to set Area dimensions stored in memory
- Large backlit LCD
- Air Flow displayed in 2 modes as an instantaneous value or up to 20 point average
- USB port includes PC software
- Includes PC software, cable, vane sensor on 3.9ft (120cm) cable, built-in stand, case, and 9V battery

SPECIFICATIONS	■ AN100 N ▲ AN200 N	HD300 N
Air Velocity (Max Res.)		
ft/min	80 to 5900 (1)	80 to 5900 (1)
m/sec	0.4 to 30.00 (0.01)	0.4 to 30.00 (0.01)
km/h	1.4 to 108.0 (0.1)	1.4 to 108.0 (0.1)
MPH	0.9 to 67.0 (0.1)	0.9 to 67 (0.1)
knots	0.8 to 58.0 (0.1)	0.8 to 58.0 (0.1)
Temperature (Max Res.)	14 to 140°F/ -10 to 60°C (0.1°)	14 to 140°F/-10 to 60°C (0.1°)
Temperature (IR)	■ No ▲ -58 to 500°F/ -50 to 500°C (0.1°/1°)	-58 to 932°F/-50 to 500°C (0.1°/1°)
Air Flow (CFM = ft ³ /min)	■ 0 to 9999CFM (1) ▲ 0 to 999,999CFM (0.1)	0 to 999,900CFM (0.001)
Air Flow (CMM = m ³ /min)	■ 0 to 9999CMM (1) ▲ 0 to 999,999CMM (0.1)	0 to 999,900CMM (0.001)
Basic Accuracy	±3%rdg; ±2°F (±1°C)	±3%rdg; ±4°F (2°C)
PC Interface	—	Yes
Datalogger	—	Directly to PC using software
CE approved	Yes	Yes
Dimensions/Weight	7x2.9x1.3" (178x74x33mm)/1.6lbs (700g)	8x3x1.9" (203x75x50mm)/12.2oz (350g)
Warranty	1 year	3 years



407113 High Temperature CFM Metal Vane Anemometer

Withstands temperatures to 175°F (80°C) and airspeed to 6890ft/min

- Display Air Flow (CFM) or Air Velocity plus Temperature
- Air Flow displayed in 3 modes: Instantaneous value, Up to 20 point average, or 2/3 flow value
- Record and Recall MIN/MAX
- Data Hold plus Auto power off
- Built-in PC Interface
- Optional Data Acquisition software 407001 and Datalogger 380340 - see details on p. 106
- Includes metal vane sensor with 3.9ft (120cm) cable, 9V battery, holster with stand, and hard case; Optional 117V (156119) or 220V (156221) AC adaptors (see p.106 for ordering).



407123 Heavy Duty Hot Wire Thermo-Anemometer

Telescoping probe is designed to fit into small openings and measure airflow down to 40ft/min

- Telescoping probe is ideal for measuring in HVAC ducts and other small vents; extends up to 7ft (2.1m) maximum length with cable and vane is 0.5" (13mm) in diameter
 - Large 1.4" (36mm) dual LCD display
 - MAX/MIN, Data Hold
 - Optional Data Acquisition software 407001 and Datalogger 380340 - see details on p. 106
 - Complete with telescoping probe with cable, six AAA batteries and protective holster
- NOTE: AC Adaptor not available for this model



407119 Hot Wire CFM Anemometer

Accurately measures Air Flow (CFM/ CMM) or Air velocity plus Temperature

- Air velocity measurements as low as 40ft/min
- Telescoping probe extends up to 3ft (940mm) long
- Measures air volume in CFM (ft³/min) and CMM (m³/min) plus Temperature simultaneously
- Air Flow displayed in 2 modes as an instantaneous value or up to 20 point average
- Record and Recall MIN/MAX
- Data Hold plus Auto power off
- Optional Data Acquisition software 407001 and Datalogger 380340 - see details on p. 106
- Complete with telescoping probe with 5.5ft (167.6cm) cable, and four AA batteries

407113 N

100 to 6890 (1)
0.5 to 35 (0.1)
1.8 to 126.0 (0.1)
1.1 to 78.3 (0.1)
1.0 to 68.0 (0.1)
32 to 175°F (0.1°)/ 0 to 80°C (0.1°)
—
0 to 999,900CFM (0.001)
0 to 999,900CMM (0.001)
±2%rdg; ±1.5°F (±0.8°C)
Optional 407001 Software (see p. 106)
Optional 380340 Datalogger (see p. 106)
Yes
7x2.9x1.3" (178x74x33mm)/1.35lbs (612g)
3 years

407123 N

40 to 3940 (10)
0.2 to 20 (0.1)
0.7 to 72.0 (0.1)
0.5 to 45 (0.1)
1.0 to 31 (0.1)
32 to 122°F (0.1°)/ 0 to 50°C (0.1°)
—
—
—
±3%rdg or ±(1%+1d)FS; ±1.5°F (±0.8°C)
Optional 407001 Software (see p. 106)
Optional 380340 Datalogger (see p. 106)
Yes
7x2.9x1.3" (178x74x32mm)/1.1lbs (482g)
3 years

407119 N

40 to 3346 (1)
0.2 to 17 (0.1)
0.7 to 61.2 (0.1)
0.9 to 38.0 (0.1)
0.4 to 33.0 (0.1)
32 to 122°F (0.1°)/ 0 to 50°C (0.1°)
—
0 to 999,900CFM (0.001)
0 to 999,900CMM (0.001)
±2%rdg; ±1.5°F (±0.8°C)
Optional 407001 Software (see p. 106)
Optional 380340 Datalogger (see p. 106)
Yes
7x2.9x1.3" (178x74x32mm)/1.1lbs (482g)
3 years

SPECIFICATIONS

Air Velocity (Max Res.)
ft/min
m/sec
km/h
MPH
knots
Temperature (°F/°C)
Temperature (IR)
Air Flow (CFM = ft ³ /min)
Air Flow (CMM = m ³ /min)
Basic Accuracy
PC Interface
Datalogger
CE approved
Dimensions/Weight
Warranty

Datalogging Made Easy

Extech is fast becoming the go-to source for compact datalogging test equipment. Now, Extech introduces the new SDL series of HVAC datalogging meters. For accurately measuring airflow and temperature, the SDL series offers flexible options including a high temperature metal vane propeller or a compact hot-wire probe. And for powerful datalogging, readings are stored directly on an SD card in Excel® format, making it easier than ever to track trends and perform extended diagnostics.



ACCESSORIES (FOR SDL300, SDL310, & SDL350)

153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

Vane Versus Hot Wire

HVAC and mechanical contractors often contact us to ask whether they should purchase a vane (propeller) or hot wire anemometer. For many technicians, it is ultimately a matter of preference but there are some distinguishing factors to keep in mind. Vane anemometers are very useful for fast, accurate measurements of air velocity. The ultra compact size of a hot wire anemometer probe makes it easy to access small openings such as louvered vents. Telescoping hot wire probes are also useful for reaching high locations.

SPECIFICATIONS

ft/min
m/sec
km/h
MPH
knots
Air Flow (CFM = ft ³ /min)
Air Flow (CMM = m ³ /min)
Temperature (air)
Temperature (Type J/K)

Basic Accuracy
PC Interface
Datalogging
CE approved
Dimensions/Weight
Warranty



SDL300 Metal Vane Thermo-Anemometer/Datalogger

Metal Vane withstands temperatures to 158°F (70°C) and air velocity to 6900ft/min

- 2% velocity accuracy via low friction ball bearing vane wheel on 39" (1m) cable
- Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Selectable data sampling rate: 1 to 3600 seconds (1 hour)
- Manually store/recall up to 99 readings
- Type K/J Thermocouple input for high temperature measurements
- Large (9999 count) LCD displays Air Velocity and Temperature simultaneously
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- Complete with 6 x AA batteries, SD card, metal vane sensor with 3.9ft (120cm) cable, and hard carrying case; (See p. 40, 41, and 74 for optional Type K and J Thermocouple probes)



SDL310 Vane Thermo-Anemometer/Datalogger

Measures Air Temperature to 122°F (50°C) and air velocity to 4930ft/min

- 2% velocity accuracy via low friction ball bearing vane wheel on 39" (1m) cable
- Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Selectable data sampling rate: 1 to 3600 seconds (1 hour)
- Manually store/recall up to 99 readings
- Type K/J Thermocouple input for high temperature measurements
- Large (9999 count) LCD displays Air Velocity and Temperature simultaneously
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- Complete with 6 x AA batteries, SD card, vane sensor with 3.9ft (120cm) cable, and hard carrying case; (See p. 40, 41, and 74 for optional Type K and J Thermocouple probes)



SDL350 Hot Wire CFM Thermo-Anemometer/Datalogger

Air Velocity meter with telescoping probe designed to fit into HVAC ducts and other small openings and can read down to 40ft/min

- Probe extends up to 4.9ft (150cm) maximum length with cable
- Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Selectable data sampling rate: 1 to 3600 seconds (1 hour)
- Manually store/recall up to 99 readings
- Type K/J Thermocouple input for high temperature measurements
- Large (9999 count) LCD displays Air Velocity and Temperature simultaneously
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- Complete with 6 x AA batteries, SD card, telescoping probe with cable, and hard case; (See p. 40, 41, and 74 for optional Type K and J Thermocouple probes)

SDL300 N

60 to 6900ft/min
0.3 to 35m/s
1.0 to 1265km/h
0.7 to 78.2MPH
0.6 to 68knots
—
—
32 to 175°F (0 to 80°C)
J: -148 to 2192°F (-100 to 1200°C)
K: -148 to 2372°F (-100 to 1300°C)
2%rdg
Optional 407001 Software (see p. 106)
20M readings using 2G SD memory card
Yes
7.2x2.9x1.9" (182X73X48mm)/17.2oz (487g)
3 years

SDL310 N

80 to 4930ft/min
0.4 to 25m/s
1.4 to 90.0km/h
0.9 to 55.9MPH
0.8 to 48.6knots
—
—
32 to 122°F (0 to 50°C)
J: -148 to 2192°F (-100 to 1200°C)
K: -148 to 2372°F (-100 to 1300°C)
2%rdg
Optional 407001 Software (see p. 106)
20M readings using 2G SD memory card
Yes
7.2x2.9x1.9" (182X73X48mm)/16.9oz (480g)
3 years

SDL350 N

40 to 3940ft/min
0.2 to 25m/s
0.7 to 72km/h
0.5 to 45MPH
1 to 31knots
0 to 1,907,000CFM
0 to 54,000CMM
32 to 122°F (0 to 50°C)
J: -148 to 2192°F (-100 to 1200°C)
K: -148 to 2372°F (-100 to 1300°C)
5%rdg
Optional 407001 Software (see p. 106)
20M readings using 2G SD memory card
Yes
7.2x2.9x1.9" (182X73X48mm)/23.1oz (655g)
3 years

CO10 Carbon Monoxide (CO) Meter



CE

Check CO level in all environments up to 1000ppm

- Auto Zero at start up
- Displays CO levels from 0 to 1000ppm
- 1ppm resolution with $\pm 5\%$ or $\pm 10\text{ppm}$ basic accuracy (whichever is greater)
- Utilizes a stabilized electrochemical gas specific (CO) fast response sensor
- Audible alarm starts at 35ppm
- Memory stores 10 readings
- Ergonomic pocket size housing
- Max Hold, Data hold buttons, and Auto Power off features
- Dimensions/Weight: 6.3x2.2x1.57" (160x56x40mm)/6.35oz (180g)
- 1 year warranty
- Complete with 9V battery, protective holster, and case

ORDERING

CO10	Carbon Monoxide Meter
------	-----------------------

EZ40 EzFlex™ Combustible Gas Detector



CE

Quickly Identifies and Pinpoints gas leaks

- 16" (406mm) gooseneck for easy access into hard to reach locations
- High Sensitivity
- One hand operation with thumb controlled sensitivity adjustment, to eliminate background gas levels
- Visible and audible alarm at 10% (LEL) Lower Explosive Limit for methane
- Locate the smallest leaks
- 1 year warranty
- Complete with 3 "C" batteries

SPECIFICATIONS

Pump driven field calibration range	10ppm
Sensor type	Solid State
Alarm	Visible and Audible @ 10% LEL for Methane
Warm-up	Approx. 1 minute
Response Time	< 2 seconds (up to 40% LEL)
Duty Cycle	Intermittent
Battery life	8 hours continuous use typical
Dimensions/ Weight	8.7 x 2.83 x 1.8" (221 x 72 x 46mm)/ 18.4oz (520g)

ORDERING

EZ40	ExFlex™ Combustible Gas Detector
------	----------------------------------

FG100 Combustible Gas Leak Detector



CE

Fast response detection of flammable gas leakage from 500 to 6500ppm

- Detects flammable gases: Liquefied Natural Gas (LNG) and Liquefied Propane Gas (LPG)
- Highly sensitive detection circuitry with audible and visual alarm
- LED indicators for gas leakage and static discharge
- Continuous operation up to 4 hours
- Dimensions/ Weight: 6.5 x 0.8" (164mm x 21mm)/0.9oz (25g)
- 1 year warranty
- Complete with pocket clip and two AAA batteries

ORDERING

FG100	Combustible Gas Leak Detector
-------	-------------------------------

CO100 Desktop Indoor Air Quality CO₂ Monitor



CE

Measures Carbon Dioxide (CO₂), Air Temperature and Humidity with user-adjustable visual and audible alarm

- Checks for Carbon Dioxide (CO₂) concentrations (0 to 9,999ppm) and displays Temperature (14 to 140°F / -10 to 60°C) and Relative Humidity (0.1 to 99.9%) readings
- Maintenance free NDIR (non-dispersive infrared) CO₂ sensor
- Indoor Air Quality displayed in ppm with Good, Normal, Poor indication
- Visible and Audible CO₂ warning alarm
- Displays Year, Month, Date, and Time
- Max/Min CO₂ value recall function
- Automatic Baseline Calibration (minimum CO₂ level over 7.5 days) or manual calibration in fresh air
- 1 year warranty
- Complete with Universal AC adaptor

ORDERING

CO100	Desktop Indoor Air Quality CO ₂ Monitor
-------	--

CO200/CO210 Desktop Indoor Air Quality CO₂ Monitor



Model CO200

CE

Model CO210 - Datalogger

Measures Carbon Dioxide (CO₂), Air Temperature and Humidity with user adjustable high/low alarms and choice of datalogging model

- Checks for Carbon Dioxide (CO₂) concentrations (0 to 9,999ppm) and displays Temperature (14 to 140°F / -10 to 60°C) and Relative Humidity (0.1 to 99.9%) readings
- Maintenance free NDIR (non-dispersive infrared) CO₂ sensor
- Indoor Air Quality displayed in ppm with Good, Normal, Poor indication
- Displays Year, Month, Date, and Time
- Max/Min CO₂ value recall function
- Auto Baseline Calibration (minimum CO₂ level over 7.5 days) or manual calibration in fresh air
- Dimensions/Weight: 4.6x4x4" (117x102x102mm)/ 7.2oz (204g)
- 1 year warranty
- Complete with Universal AC adaptor; Model CO210 also includes software and cable
- **Model CO200** - Visible and Audible CO₂ warning alarm with relay output for ventilation control
- **Model CO210** - Datalogs up to 5333 points for each parameter and can be downloaded to a PC using included Windows® compatible software

ORDERING

CO200	Desktop Indoor Air Quality CO ₂ Monitor
CO210	Desktop Indoor Air Quality CO ₂ Monitor/Datalogger



Desktop Carbon Dioxide (CO₂) Meter monitors the air quality in conference rooms insuring proper air ventilation

CO250 Portable Indoor Air Quality CO₂ Meter



Measure CO₂ level in office buildings to insure proper ventilation.

CE

Measures Carbon Dioxide (CO₂), Temperature, Humidity, Dew Point, and Wet Bulb and calculates statistical 8 hour and 15 minute time weighted averages

- Checks for Carbon Dioxide (CO₂) concentrations, measures Temperature and Relative Humidity, and displays calculated Dew Point and Wet Bulb
- Calculates statistical weighted averages of TWA (8 hour time weighted average) and STEL (15 minute short term exposure limit)
- Maintenance free NDIR (non-dispersive infrared) CO₂ sensor
- Backlit triple LCD display and user programmable audible alarm
- RS-232 interface, software and cable included to analyze data on a PC
- Optional 33% and 75% RH calibration bottles (RH300-CAL)
- 1 year warranty
- Complete with software and cable, 4 AA batteries, and carrying case

SPECIFICATIONS	RANGE	RESOLUTION
Carbon Dioxide (CO ₂)	0 to 5,000ppm	1ppm
Temperature	14 to 140°F (-10 to 60°C)	0.1°F/°C
Humidity	0.0 to 99.9%	0.1%
Wet Bulb and Dew Point	Calculated	
Dimensions	7.9x2.7x2.3" (200x70x57mm)	
Weight	6.7 oz. (190g)	

ORDERING	
CO250	Portable Indoor Air Quality CO ₂ Meter
RH300-CAL	33% and 75%RH Calibration Kit

EA80 Indoor Air Quality CO₂ Meter/Datalogger



CE

Measures Carbon Dioxide (CO₂), Temperature, Humidity, Dew Point and Wet Bulbs

- Checks for Carbon Dioxide (CO₂) concentrations, measures Temperature and Relative Humidity, and displays calculated Dew Point and Wet Bulb
- Maintenance free dual wavelength NDIR (non-dispersive infrared) CO₂ sensor
- Continuous (20,000 sets) or manual (99 sets) datalogging
- Data hold, Max/Min with Time stamp, Alarm, and Auto Power Off
- Easy calibration in fresh air
- 1 year warranty
- Complete with (6) AAA batteries, RS-232 cable, and Windows® compatible software

SPECIFICATIONS	RANGE	RESOLUTION
Carbon Dioxide (CO ₂)	0 to 6,000ppm	1ppm
Temperature	-4 to 140°F (-20 to 60°C)	0.1°F/°C
Humidity	10 to 95%	1%
Datalogging	Continuous: 20,000 sets/Manual 99 sets	
Dimensions	5.3 x 2.8 x 1.2" (135 x 72 x 31mm)	
Weight	8.2oz (235g)	

ORDERING	
EA80	Indoor Air Quality CO ₂ Meter/Datalogger

Forums • Chat • Videos • Live Events

PLANET EXTECH  **JOIN TODAY!**

www.planetextech.com

SD800 CO₂/Humidity/Temperature Datalogger



Complete with (6) AAA batteries, 2G SD memory card, Universal AC adaptor, and mounting bracket; 1 year warranty

Records data on an SD card in Excel® format to transfer to a PC for analysis

- Checks for Carbon Dioxide (CO₂) concentrations
- Maintenance free dual wavelength NDIR (non-dispersive infrared) CO₂ sensor
- Triple LCD simultaneously displays CO₂, Temperature and Relative Humidity
- Selectable data sampling rate: 5, 10, 30, 60, 120, 300, 600 seconds or Auto

SPECIFICATIONS	RANGE	MAX. RESOLUTION	BASIC ACCURACY
CO ₂	0 to 4,000ppm	1ppm	±40ppm (<1000ppm); ±5% rdg (>1000ppm)
Temperature	32 to 122°F (0 to 50°C)	0.1°F/°C	±1.8°F/0.8°C
Humidity	10 to 90%	0.1%	±4%RH
Datalogging/PC Interface	20M data using 2G SD memory card/ Optional 407001 software (see p. 106)		
Dimensions/ Weight	5.2 x 3.1 x 1.3" (132 x 80 x 32mm)/ 9.9oz (282g)		

ORDERING

SD800	CO ₂ /Humidity/Temperature Datalogger
-------	--

475055 High Capacity Force Gauge with PC Interface



Complete with tension and compression adaptors, six AA 1.5V batteries, and case; Optional AC Adaptors available 153117 or UA100-240, see below for ordering; 1 year warranty

220lbs (100kg), Tension and Compression

- Tension or Compression, Peak hold and Zero functions
- Large LCD with back light feature and Positive/Reverse display for easy readability
- PC interface and optional software

SPECIFICATIONS

Range	220 lbs, 100kg, 980 Newtons
Basic Accuracy (23°C)	±(0.5%rdg)
Resolution	0.05lbs, 0.05kg, 0.2 Newtons
Overload capacity	150kg
Update Rate	Fast mode 0.2 seconds; Slow mode 0.6 seconds
Full scale deflection	<1mm
Transducer type	Load cell
Dimensions/ Weight	Meter: 8.5 x 3.5 x 1.8" (215 x 90 x 45 mm)/ 1 lb (450g)

ORDERING

475055	High Capacity Force Gauge with PC Interface
407001	Data Acquisition Software and Serial Cable
407001-USB	USB adaptor for 407001

475040/475044 Digital Force Gauges



Complete with hook adaptor for tension, compression adaptors (flat, cone and chisel head), 5" (127mm) extension rod, 6 AA batteries, and case; 1 year warranty

Push/Pull measurements in kg, lbs, oz and Newton units

- 5 digit 0.4" (10mm) LCD with reversible display feature to match viewing angle
- Zero Adjust, Peak Hold, and Selectable fast/slow response feature
- Over-range, low battery, and advanced function indication

SPECIFICATIONS	MODEL 475040	MODEL 475044 (HIGH CAPACITY)
Range	176oz, 5000g, 49 Newtons	44lbs, 20kg, 196 Newtons
Basic Accuracy (23°C)	±(0.4%)	±(0.5%)
Resolution	0.05oz, 1g, 0.01 Newtons	0.01lbs, 0.01kg, 0.05 Newtons
Overload capacity	10kg	30kg
Update Rate	Fast mode 0.2secs; Slow mode 0.6secs	
Full scale deflection	2.00mm	
Transducer type	Load cell	
Dimensions/ Weight	Meter: 8.9x3.3x1.5" (227x83x39mm)/ 1.2lbs (551g)	

ORDERING

475040	Digital Force Gauge
475044	High Capacity Force Gauge
479097	Accessory Kit (2ea.- hook, flat, cone, & chisel head adaptors)
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

VB500 4-Channel Vibration Meter/Datalogger



CE

Available Q4, 2011

Simultaneously displays four channels

- Selectable data sampling rate: 5 to 600 seconds
- Remote vibration sensor with magnetic adapter on 39" (1m) cable
- Wide frequency range of 10Hz to 1kHz
- Basic accuracy of $\pm 5\%$
- RMS or Peak Value measurement modes
- Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Data Hold freezes the reading in the display
- Auto power off saves battery life
- Meets ISO2954 standard
- 1 year warranty
- Complete with 4 remote sensors, magnetic mounts, 8 x AA batteries, SD card, 100-240V Universal AC Adaptor and durable hard carrying case

SPECIFICATIONS

Acceleration	656ft/s ² , 200m/s ² , 20.39g (peak)
Velocity	7.87in/s, 200mm/s, 19.99cm/s (peak)
Displacement	0.078in, 2mm (peak-to-peak)
Resolution	1ft/s ² , 0.1m/s ² , 0.01g; 0.01in/s, 0.1mm/s, 0.01cm/s; 0.001in, 0.001mm
Basic accuracy	$\pm 5\%$
Memory	20M data records using 2G SD card
Dimensions	Meter: 8 x 3 x 1.5" (203 x 76 x 38mm)
Weight	Meter: 1.13lbs (515g)

ORDERING

VB500	N	4-Channel Vibration Meter/Datalogger
-------	---	--------------------------------------

SDL800 Vibration Meter/Datalogger



CE

Available Q4, 2011

Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC

- Manually datalog up to 99 readings and continuous datalogging of 20M readings via 2G SD card
- Selectable data sampling rate: 1 to 3600 second (1 hour)
- Remote vibration sensor with magnetic adapter on 47.2" (1.2m) cable
- Wide frequency range of 10Hz to 1kHz
- Basic accuracy of $\pm 5\%$
- RMS, Peak Value or Max Hold measurement modes
- Data Hold freezes the reading in the display
- Min/Max and Zero function
- Auto power off saves battery life
- Meets ISO2954 standard
- 3 year warranty
- Complete with remote sensor, magnetic mount, 6 x AA batteries, SD card, and hard carrying case; Optional AC Adaptor

SPECIFICATIONS

Acceleration	656ft/s ² , 200m/s ² , 20.39g
Velocity	7.87in/s, 200mm/s, 19.99cm/s
Displacement	0.078in, 2mm (peak-to-peak)
Resolution	1ft/s ² , 0.1m/s ² , 0.01g; 0.01in/s, 0.1mm/s, 0.01cm/s; 0.001in, 0.001mm
Basic accuracy	$\pm 5\%$
Memory	20M data records using 2G SD card
PC Interface	Optional 407001 software (see p. 106)
Dimensions	Meter: 7.2x2.9x1.9" (182X73X48mm)/16.8oz (475g)
Weight	Meter: 1.3lbs (599g)

ORDERING

SDL800	Vibration Meter/Datalogger
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

461880 Vibration Meter + Laser Combination Tachometer



CE

Measures Acceleration, Velocity, Displacement, RPM and Surface Speed

- Unique large LCD displays characters on reverse direction depending on function
- Windows® compatible software (included) to analyze data on your PC
- Basic accuracy: Tachometer: $\pm(0.05\% \text{ rdg})$, Vibration: $\pm(5\% \text{ rdg})$
- Dimensions/Weight with Probe: 7.4x3x1.8" (188x75.5x46.8mm)/ 1.12lbs (507g)
- 1 year warranty
- Complete with vibration sensor with 39" (1m) cable, magnetic mount, wheels (cone & flat tips), reflective tape, 4 AA batteries, software with cable, and hard carrying case

Vibration Meter Functions and Features:

- Velocity (max res.): 7.87in/s (0.01in/s), 200mm/s (0.1mm/s), 19.99cm/s (0.01cm/s); Acceleration (max res.): 656ft/s² (1ft/s²), 200m/s² (0.1m/s²), 20.39g (0.01g) Displacement: 0.078in (0.001in), 2mm (0.001mm); Frequency: 10Hz to 1kHz
- RMS or Peak Value measurement modes
- Manual/Auto store/recall up to 1000 readings, Data Hold and Auto power off features

Tachometer Functions and Features:

- RPM ranges — Photo: 10 to 99,999rpm / Contact: 0.5 to 19,999rpm; Surface Speed: 0.2 to 6,560ft/min (0.05 to 1,999.9m/min)
- Uses a laser for greater distance non-contact measurements up to 4.9ft (1.5m)
- Stores Last, Max, and Min readings

ORDERING

461880 N Vibration Meter + Laser Combination Tachometer

VB400 Pen Vibration Meter



CE

Includes both test pin tip and magnetic base

Measures RMS Acceleration and Velocity with metric and imperial units

- Ranges — Acceleration (RMS): 656ft/s², 20.39g, 200m/s²; Velocity (RMS): 7.87in/s, 2.00cm/s, 200mm/s; Frequency: 10Hz to 1kHz
- Resolution to 1ft/s²; 0.01g; 0.1m/s² and 0.02in/s; 0.01cm/s; 0.1mm/s
- Basic accuracy of $\pm 5\%$
- Zero adjustment, Data Hold, and Low battery indicator
- Water and dust resistant to IP65
- Dimensions: Meter: 6.9 x 1.6 x 1.3" (175 x 40 x 32mm); Weight: 0.53lbs (240g) Sensing Head: 0.4" dia x 1.9" (9mm dia x 30mm)
- 1 year warranty
- Complete with test pin tip, magnetic base, 4 x AAA batteries, and pouch case

ORDERING

VB400 Pen Vibration Meter

VB300 3-Axis G-Force Datalogger



CE Available Q4 2011



Magnetized/Bolt-on Mounting Base

USB connector easily plugs into a computer for data analysis

Built-in 3-axis accelerometers record the shock and time when it occurs

- Measure and compute real-time spectral data using FFT
- Acceleration — Sampling Rate: 200Hz, Range: $\pm 18g$, Resolution: 0.00625g, Accuracy: $\pm 0.5g$; Bandwidth: 0 to 60Hz
- Record storage, transport or operational data over time
- Record and time 3-axis shock and peaks
- Datalogs 85,764 peak acceleration and 210 freefall samples with the time
- Choose X-, Y-, Z-axis or any combination (via software)
- Programmable data sampling rate: 1 second to 24 hours
- Manual/Programmable start modes and user-programmable alarm threshold
- Dimensions/ Weight: 3.7 x 1.1 x 0.8" (95 x 28 x 21mm)/ 1oz (20g)
- Complete with Magnetized/Bolt-on Mounting Base, 3.6V Lithium battery and Windows® compatible analysis software; 1 year warranty

ORDERING

VB300 3-Axis G-Force Datalogger
42299 3.6V Lithium Battery (pk of 2)

Reliable, Easy to Use, and Accurate

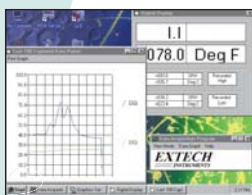
"I use my Extech 407026 Heavy Duty Light Meter with PC Interface for measuring foot candles on LEED certification jobs. The Extech has impressive durability and battery life. Do a good comparison; Extech will come out on top."

Gregg S., New York



ACCESSORIES

407001	Data Acquisition Software
407001-USB	USB Adaptor
380340	Datalogger (stores 8000 readings)
156119	117V AC Adaptor
156221	220V AC Adaptor
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)



407001 Data Acquisition Software

- Enables users of specific Extech meters to capture, display and store readings on a PC
- Sampling time: 1sec - 60 mins
- Import data into Lotus or Excel
- Includes Windows® 95/98/2000/NT/XP/7 compatible software and serial cable
- Optional USB Adaptor — 407001-USB



401027 Pocket Foot Candle Light Meter

Measures up to 2,000Fc for basic lighting applications

- Easy to operate Foot candle light meter with 2 ranges
- Convenient pocket size design
- Over-range indication
- Complete with 9V battery, light sensor with protective cover and 47" (1.2m) cable, and built-in stand



401025 Foot Candle/Lux Meter

Includes analog output and fast/slow response feature

- Accurately displays light level in terms of Fc or Lux over three ranges
- Select fast (1 second) or slow (2 seconds) response time
- Analog output of 1mV per count for capturing readings to a recorder
- Complete with 9V battery, light sensor with protective cover and 47" (1.2m) cable, and built-in stand

SPECIFICATIONS	401027 N	401025 N
Fc Range	200, 2000Fc	200, 2000, 5000Fc
Lux Range	—	2000, 20000, 50000Lux
Max. Resolution	0.1Fc	0.1Fc/1Lux
Basic Accuracy	±5% FS	±5% FS
Temperature (Type J/K)	—	—
Cosine & Color Corrected	Yes	Yes
Analog output	—	Yes
PC Interface	—	—
Datalogging	—	—
CE approved	Yes	Yes
Dimensions/ Weight	5.2x2.8x1" (131x70x25mm)/ 6.9oz (195g)	6.4x2.8x1.2" (163x70x30mm)/ 8.3oz (220g)
Warranty	1 year	1 year



LT300 Light Meter

Digital and Analog display of light in Fc or Lux

- Wide range to 20,000 Foot-Candles or 200,000 Lux with high resolution to 0.01 Fc/Lux
- Relative mode indicates change in light levels
- Peak mode captures highest reading
- Remote light sensor on 12" (305mm) coiled cable — expandable to 24" (609mm)
- Utilizes precision photo diode and color correction filter
- Cosine and color corrected measurements
- MIN/MAX and Data Hold
- Large LCD display with analog bargraph
- Backlight for readings in low light levels
- Complete with 9V battery, light sensor with protective cover, protective holster, and pouch case



407026 Heavy Duty Light Meter with PC Interface

Enhance accuracy by selecting one of four lighting types plus PC interface

- % displays differential from reference point
- "ZERO" Re-Calibration
- Enhance accuracy by selecting lighting type Tungsten/Daylight, Fluorescent, Sodium, Mercury
- MAX/MIN/AVG, Data Hold, and Auto power off
- Built-in PC serial interface with optional 407001 Data Acquisition software 407001 and Datalogger 380340 (see p. 106 for details)
- Complete with 9V battery, light sensor, and protective cover with 46" (1.2m) cable, and protective holster with stand. Optional 117V (156119) or 220V (156221) AC adaptors.



SDL400 Light Meter/Datalogger

Datalogger date/time stamps and stores readings on an SD card in Excel® format

- Wide range: 10,000Fc/100kLux
- Cosine and color-corrected measurements
- Utilizes precision photo diode and spectral response filter
- Selectable data sampling rate: 1 to 3600 seconds (1 hour)
- Manually store/recall up to 99 readings
- Large backlit LCD
- Type K/J Thermocouple input
- MIN/MAX and Data Hold
- "ZERO" Re-Calibration
- Auto power off with disable function
- Built-in PC interface
- Complete with 6 x AA batteries, SD card, hard case & light sensor with protective cover; Optional AC Adaptor 153117 or UA100-240, also see p. 40, 41, and 74 for optional Type K and J Thermocouple probes

LT300 N	407026 N	SDL400 N	SPECIFICATIONS
20,000Fc	200, 2000, 5000Fc	200, 2000, 10kFc	Fc Range
200,000Lux	2000, 20000, 50000Lux	2000, 20k, 100kLux	Lux Range
0.01Fc/Lux	0.1Fc/1Lux	0.1Fc/1Lux	Max. Resolution
±5% rdg	±4%FS	±4%rdg	Basic Accuracy
—	—	J: -148 to 2192°F (-100 to 1200°C) K: -148 to 2372°F (-100 to 1300°C)	Temperature (Type J/K)
Yes	Yes	Yes	Cosine & Color Corrected
—	—	—	Analog output
—	Optional 407001 Software (see p. 106)	Optional 407001 software (see p. 106)	PC Interface
—	Optional 380340 Datalogger (see p. 106)	Manual: 99 readings Continuous: 20M readings with 2G SD card	Datalogging
Yes	Yes	Yes	CE approved
5.9x2.95x1.57" (150x75x40mm/ 7oz (200g))	7x2.9x1.3" (178x74x33mm)/ 1.6lbs (726g)	7.2x2.9x1.9" (182X73X48mm)/16.8oz (475g)	Dimensions/ Weight
1 year	3 years	3 years	Warranty

Bright Solutions from Extech

Extech light meters deliver accurate, repeatable readings for users in a range of industries. Along with available calibration traceable to N.I.S.T., Extech light meters stand out with big-digit displays, wide-range models, ruggedized designs, as well as memory and datalogging capabilities.



EA31 EasyView® Big Digit Light Meter

Measures light intensity up to 20,000Fc/Lux

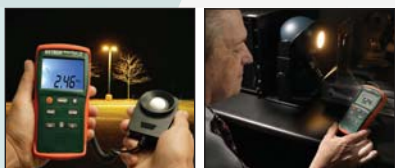
- Compact and rugged design with large display and bargraph
- Data Hold and MIN/MAX readings
- Auto power off
- Complete with built-in stand, light sensor and protective cover with 39" (1m) coiled cable, protective holster, 6 AAA batteries, and carrying case



EA30 EasyView® Big Digit, Wide range Light Meter

Measures high intensity light up to 40,000Fc and 400,000Lux, is ideal for outdoor applications

- Compact and rugged design with large display and bargraph
- Relative function for zero or difference from reference value
- Peak captures short light pulses to 100µSeconds
- Data Hold and MIN/MAX readings
- Auto power off, Zero function
- Complete with built-in stand, light sensor and protective cover with 39" (1m) coiled cable, protective holster, 6 AAA batteries, and carrying case



NIST traceable certificate with data is available when you order your meter with Certificate Traceable to NIST.

SPECIFICATIONS	EA31 ^N	EA30 ^N
Display counts	2000 count LCD	4000 count LCD
Fc Range	20, 200, 2000, 20,000Fc	40, 400, 4000, 40,000Fc
Lux Range	20, 200, 2000, 20,000Lux	40, 400, 4000, 40,000, 400,000Lux
Max. Resolution	0.01Fc/Lux	0.01Fc/Lux
Basic Accuracy	±3%rdg + 0.5%FS	±3%rdg + 0.5%FS
Cosine & Color Corrected	Yes	Yes
PC Interface	—	—
Datalogging	—	—
CE approved	Yes	Yes
Dimensions	5.9x2.8x1.4" (150x72x33mm)	5.9x2.8x1.4" (150x72x33mm)
Weight	8.3oz (235g)	8.3oz (235g)
Warranty	1 year	1 year



EA33 EasyView® Light Meter with Memory

Advanced illuminance functions and features

- Wide measurement range to 99,990Fc (999,900 Lux)
- Luminous intensity (candela) calculations
- Store and recall up to 50 measurements, includes relative or real time clock stamp
- Ripple function excludes the effect of stray light from the primary light source measurement
- Auto power off with disable
- Multiple point average function
- Timed-Hold, Relative in absolute value or % deviation, and Comparator function with high/low alarms
- Includes built-in stand, light sensor and protective cover with 36" (0.9m) coiled cable, protective holster, 6 AAA batteries, and case



HD400 Light Meter

Large backlit display with fast, 40-segment bar graph for capturing trends

- Wide range to 40,000Fc or 400,000Lux
- Cosine and color corrected measurements
- Utilizes precision silicon photo diode and spectral response filter
- Peak mode (10ms) captures highest reading
- Relative mode indicates change in light levels
- Heavy duty, rugged double molded housing
- Built-in USB port
- Includes light sensor and cover with 39" (1m) cable, Windows® compatible software with USB cable, built-in stand, hard carrying case, and 9V battery



HD450 Light Meter Datalogger

Automatically stores up to 16,000 readings or manually store/recall up to 99 readings

- Records in a continuous mode up to 16,000 readings
- Wide range to 40,000Fc or 400,000Lux
- Cosine and color corrected measurements
- Utilizes precision silicon photo diode and spectral response filter
- Peak mode (10ms) captures highest reading
- Relative mode indicates change in light levels
- Heavy duty, rugged double molded housing
- Built-in USB port
- Includes light sensor and cover with 39" (1m) cable, Windows® compatible software, USB cable, built-in stand, case, and 9V battery

EA33 <small>N</small>	HD400 <small>N</small>	HD450 <small>N</small>	SPECIFICATIONS
999,999 count LCD	4000 count backlit LCD	4000 count backlit LCD	Display counts
9.999, 99.99, 999.9, 9999, 99,990Fc	40, 400, 4000, 40kFc	40, 400, 4000, 40kFc	Fc Range
99.99, 999.9, 9999, 99,990, 999,900Lux	400, 4000, 40k, 400kLux	400, 4000, 40k, 400kLux	Lux Range
0.001Fc/0.01Lux	0.01Fc/0.1Lux	0.01Fc/0.1Lux	Max. Resolution
±3%	±5%	±5%	Basic Accuracy
Yes	Yes	Yes	Cosine & Color Corrected
—	USB with software included	USB with software included	PC Interface
—	Directly to PC using software	16,000 data (continuous)/ 99 data (manual)	Datalogging
Yes	Yes	Yes	CE approved
5.9x2.8x1.4" (150x72x33mm)	6.7x 3.1x1.6" (170x80x40mm)	6.7x 3.1x1.6" (170x80x40mm)	Dimensions
11.29oz (320g)	13.7oz (390g)	13.7oz (390g)	Weight
1 year	3 years	3 years	Warranty

Unrivaled Selection

No one offers a better selection of sound level meters than Extech. With models for every application, capabilities include Type 2 compliance, calibration traceable to N.I.S.T., PC connectivity, datalogging, octave band analyzer, ultra compact and wall-mounted designs, and personal dosimeters.

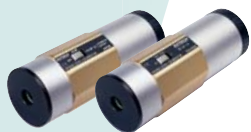


ACCESSORIES

TR100	Tripod (for meters with Tripod mount feature)
40705X	AC/DC Recorder Output Cable
407744 N	94dB Sound Calibrator (0.5", 1" microphones)
407766 N	94/114dB Sound Calibrator (0.5", 1" microphones)

Sound Level Calibrators

- Calibrate and verify Sound Meter operation
- 1kHz sine wave at 94dB/114dB (407766) or 94dB (407744) is generated to an accuracy of $\pm 5\%$ (frequency) and $\pm 0.5\text{dB}$ (94dB); $\pm 0.8\text{dB}$ (114dB)
- For use with both 0.5" to 1.0" microphones
- For use with all Extech Sound Level Meters
- Includes screwdriver, batteries, and case



407703A Analog Sound Level Meter

Check noise level economically

- Easy to read analog display
- MAX Hold
- Battery check
- Analog AC output for connection to chart recorders and dataloggers
- Tripod mount for field use (optional TR100 Tripod — sold separately)
- Complete with 9V battery



407730 Digital Sound Level Meter

Analog bargraph with 30dB range updates every 40ms

- $\pm 2\text{dB}$ accuracy with 0.1dB resolution
- Analog AC output for connection to chart recorders and dataloggers
- Record MAX/MIN values over time
- Auto power off and MAX Hold functions
- Utilizes 0.5" (12.7mm) condenser microphone
- Tripod mount for field use (optional TR100 Tripod — sold separately)
- Complete with microphone wind screen and four AAA batteries

SPECIFICATIONS	407703A N	407730 N
Range	54 to 126dB	40 to 130dB
Basic Accuracy	$\pm 2\text{dB}$	$\pm 2\text{dB}$
Weighting (A&C)	Yes	Yes
Response Time (Fast/Slow)	Yes	Yes
Condenser Microphone	0.5" (12.7mm)	0.5" (12.7mm)
Analog Output	AC	AC
CE approved	Yes	Yes
Dimensions	7.1x2.7x1.4" (180x68x36mm)	9x2.2x1.7" (230x57x44mm)
Weight	5.1oz (145g)	5.6oz (160g)
Warranty	1 year	1 year



Optional 407732-KIT

407732 Type 2 Sound Meter

Two range meter with backlit LCD display

- High accuracy meets Type 2 standards (ANSI S1.4-1983, IEC 60651, EN 60651)
- High & Low measuring ranges
- Data Hold and MAX Hold functions
- Backlit display to view in dimly lit area
- Complete with microphone wind screen and 9V battery
- Optional 407732-NISTL includes Certificate of Calibration Traceable to NIST at single point calibration to 94dB
- **Model 407732-KIT** includes 407732 Sound Meter, 407722 94dB Sound Calibrator, and protective hard carrying case (Optional NIST traceable certificate available for kit: 407732-KIT-NIST includes 407732-NISTL and 407722-NIST) - see p. 144 for ordering info



407736 Type 2 Sound Meter with Calibration Check

Two range meter with analog outputs

- High accuracy meets Type 2 standards (ANSI S1.4-1983, IEC 60651, EN 60651)
- High and Low measuring ranges
- MAX Hold with reset button
- Built-in calibration check (94dB)
- Analog AC/DC outputs for connection to an analyzer or recorder
- Tripod mount for field use (optional TR100 Tripod — sold separately)
- Optional 407744 or 407766 Sound Calibrator
- Complete with microphone wind screen, 9V battery, and carrying case



407750 Sound Level Meter with PC Interface

Big backlit display, PC interface & background sound absorber

- High accuracy meets Type 2 standards (ANSI S1.4-1983, IEC 60651, EN 60651)
- Background noise absorber for noise measurements with high ambient noise levels
- PC interface for capturing data to PC, optional Windows® compatible software (407752)
- Large backlit display with analog bargraph
- Auto/Manual ranging and MIN/MAX readings
- Analog AC/DC outputs for connection to a recorder
- Tripod mount (optional TR100 Tripod — sold separately)
- Complete with microphone wind screen, 9V battery and case

■ 407732 N | ▲ 407732-KIT N

Low: 35 to 100dB, High: 65 to 130dB
±1.5dB (Type 2)
Yes
Yes
0.5" (12.7mm)
—
Yes
Meter: 8.2x2.1x1.25" (210x55x32mm)
Meter: 8.1oz (230g)
1 year

407736 N

Low: 35 to 90dB; High: 75 to 130dB
±1.5dB (Type 2)
Yes
Yes
0.5" (12.7mm)
AC/DC
Yes
Meter: 9.5x2.7x1" (241x69x25mm)
Meter: 7.6oz (215g)
1 year

407750 N

30 to 130dB
±1.5dB (Type 2)
Yes
Yes
0.5" (12.7mm)
AC/DC
Yes
Meter: 10x3.1x1.5" (256x80x38mm)
Meter: 8.5oz (240g)
1 year

SPECIFICATIONS

Range
Basic Accuracy
Weighting (A&C)
Response Time (Fast/Slow)
Condenser Microphone
Analog Output
CE approved
Dimensions
Weight
Warranty

Sound Investment for University

"We switched to Extech because of the price and the availability of many different models. I use the sound meter to measure ambient noise in our college's laboratories. I like the quality of the meter and its documentation. Extech offers a large line of products and the prices are reasonable."

Abdie T., California



407768 Sound Level Meter with PC Interface

Includes Windows® compatible software

- ±1.4dB accuracy
- High accuracy meets Type 2 standards (ANSI S1.4-1983, IEC 61672 Class 2, EN 60651)
- Auto/Manual ranging
- MIN/MAX and Max Hold
- PC interface for capturing data directly on a PC
- Analog AC output for connection to a recorder
- Tripod mount ideal for field use (optional TR100 Tripod — sold separately)
- Complete with 9V battery, Windows® compatible software, Serial cable, microphone wind screen and carrying case

HD600 20,000 Point Datalogging Sound Level Meter

Double Molded housing with USB port

- ±1.4dB accuracy
- Meets ANSI and IEC 61672-1 Type 2 standards
- Capture up to 10 readings/sec when connected to a PC
- Datalogging capability up to 20,000 records at speeds from 1/sec to 1/59sec
- Records readings with real date and time stamp
- MIN/MAX and Data Hold
- USB port includes PC software
- Tripod included for convenient field use
- Auto power off with disable capability
- Complete with AC Adaptor, Windows® compatible software with USB cable, wind screen, tripod, built-in stand, hard carrying case, and 9V battery



ACCESSORIES

407744	N	94dB Sound Calibrator (0.5", 1" microphones)
407766	N	94/114dB Sound Calibrator (0.5", 1" microphones)
TR100		Tripod (for meters with Tripod mount feature)
40705X		AC/DC Recorder Output Cable (3ft/0.9m)
407764-EXT		15ft (4.7m) Microphone Extension Cable
USB100		RS-232 to USB adaptor
AC Adaptors for 407764, 407780, 407790		
144118		110V AC Adaptor
144220		220V AC adaptor
144240		240V AC adaptor
UA100-240		100-240V AC Adaptor with 3 plugs (US, EU, UK)

SPECIFICATIONS	407768 N	HD600 N
Range	30 to 130dB	30 to 130dB
Basic Accuracy	±1.4dB	±1.4dB
Weighting (A & C)	Yes	Yes
Response Time (Fast/Slow)	Yes	Yes
Condenser Microphone	0.5" (12.7mm)	0.5" (12.7mm)
Analog Output	AC	AC/DC
PC Interface	Yes	Yes
Datalogging	—	20,000 Records
CE approved	Yes	Yes
Dimensions/Weight	10.6x2.7x1.1" (268x68x29mm)/10oz (284g)	10.9x3x2" (278x76x50mm)/12.3oz (350g)
Warranty	1 year	3 years



SDL600 Data Logging Sound Level Meter with SD Card

Datalogging capability up to 20M records using a 2G SD card

- ±1.4dB accuracy
- Meets ANSI and IEC 61672-1 Type 2 standards
- Auto or Manual ranging
- User programmable sampling rate from 1 to 3600 seconds
- Records readings with date and time stamp
- Manual store/recall of up to 99 records
- Min/Max, Peak Hold, and Data Hold functions
- Auto power off with disable capability
- Built-in PC interface
- Complete with SD Card, wind screen, 6 AA batteries, and hard carrying case; Optional AC Adaptor UA100-240



407764 128,000 point Datalogging Sound Level Meter

Type 2 meter with datalogging memory plus PC interface

- High accuracy meets Type 2 standards (ANSI S1.4-1983, IEC 60651, EN 60651)
- Large LCD with bargraph display
- Stored data can be transferred to a PC via RS-232 interface
- Real time and Date are logged with data; MAX Hold function
- Tripod mount ideal for field use (optional TR100 Tripod — sold separately)
- Optional 15ft (4.7m) microphone extension cable 407764-EXT for measurements in enclosures and other remote locations
- Complete with microphone wind screen, Windows® compatible software, Serial cable, 4 AA batteries, and case; (Optional AC Adaptor - see p. 112)



407780 Integrating Sound Level Datalogger

Leq and SEL measurements with built-in datalogger and PC interface

- Meets Type 2 standards (ANSI S1.4-1983, IEC 60651, EN 60651)
- Datalogging function records up to 32,000 records
- Programmable integrating time; Real time calendar/clock
- Linearity over wide range (100dB)
- Display modes: SPL, SEL, Lmax/Lmin, Leq
- Impulse/Fast/Slow response time
- Tripod mount ideal for field use (optional TR100 Tripod — sold separately)
- Complete with cable, 9 to 25 pin gender changer, Windows® compatible software, microphone wind screen, 4 AA batteries and carrying case; (Optional AC Adaptor - see p. 112)

SDL600 N

30 to 130dB (3 ranges)
±1.4dB
Yes
Yes
0.5" (12.7mm)
AC
Yes
20M Records on 2G Memory Card
Yes
9.8x2.9x1.9" (250X73X48mm)/18.3oz (520g)
3 years

407764 N

30 to 130dB
±1.5dB
Yes
Yes
Detachable 0.5" (12.7mm)
AC/DC
Yes
128,000 Records
Yes
10.4x2.8x0.8" (265x72x21mm)/11.5oz (358g)
1 year

407780 N

30 to 130dB
±1.5dB
Yes
Yes
Detachable 0.5" (12.7mm)
AC/DC
Yes
32,000 Records
Yes
10.4x2.8x0.8" (265x72x21mm)/10.9oz (310g)
1 year

SPECIFICATIONS

Range
Basic Accuracy
Weighting (A & C)
Response Time (Fast/Slow)
Condenser Microphone
Analog Output
PC Interface
Datalogging
CE approved
Dimensions/Weight
Warranty

407760 USB Sound Level Datalogger



CE



Features Record and Alarm LEDs, tripod, and USB connectivity



High accuracy datalogging of up to 129,920 records

- Designed to meet ANSI and IEC 61672 Class 2 standards
- USB interface for easy setup and data download
- Selectable data sampling rate
- Records readings with real time clock
- Two start methods: programmed (from PC) or manual
- 1 year warranty
- Complete with 3.6V Lithium battery, Windows® compatible software, USB cover, tripod, and windscreen

SPECIFICATIONS

Condenser Microphone	0.5" (12.7mm)
Range	30 to 130dB
Frequency Range	31.5 to 8kHz
Basic accuracy	±1.4dB
Weighting	A and C
Response Time	Fast (125ms)/Slow (1s)
Datalogging / PC Interface	129,920 points / USB
Dimensions/Weight	5.1x1.1x0.9" (130x30x25mm)/ 1oz (20g)

ORDERING

407760 N	USB Sound Level Datalogger
42299	3.6V Lithium Battery (pk of 2)

SL130G Sound Level Alert with Alarm



CE

Continuous monitoring of Sound Level — Built-in LEDs alert user when sound level is too high or too low

- Bright LEDs (red flashing or green) alert user when sound level is too high or too low – LEDs can be read from 30m (100ft)
- Ideal for hospital, auditoriums, schools and other areas where there is a need for being alerted when sound level reaches set point
- Meets ANSI Type 2 and EN IEC 60651 standards — compliant with OSHA
- Wall, desk or tripod mount (optional TR100 tripod — sold separately)
- Adjustable high/low limit indication with output to drive external relay module (Optional SL123 & SL124 relay modules)
- Microphone rotates 180° for desired placement. Optional 15ft (5m) microphone extension cable (SL125) for remote monitoring
- 1 year warranty
- Complete with universal AC adaptor and microphone wind screen

SPECIFICATIONS

Display	4.6 x 3.125" (117x79mm) multifunction LCD
Frequency bandwidth	31.5 Hz to 8 kHz
Microphone	0.5" Electret Condenser Microphone (detachable)
Measurement ranges	30 to 80dB, 60 to 110dB, 80 to 130dB
Frequency weighting	'A' and 'C'
Response time	Fast: 125ms / Slow: 1s
Resolution	0.1dB
Alarm output	3.5mm Mono Phone Plug, Maximum: 3.4mA @ 5 VDC
Minimum Output	Voltage: 2.5 VDC
Power	AC/DC Adaptor for full functions; 8xAAA batteries for monitoring function only without LED alert
Dimensions/Weight	8.75x7.1x1.25" / 0.63 lbs. (22x18x3.2cm / 285g)

ORDERING

SL130G N	Sound Level Alert
SL123	AC Alarm Relay Module 9 foot cable (3m)
SL124	DC Alarm Relay Module 9 foot cable (3m)
SL125	Remote Microphone cable 15' (5m)
TR100	Tripod (for meters with Tripod mount feature)
407766 N	Sound Level Calibrator, 94/114dB

407790 Real Time 1/3 Octave Band Analyzer



Complete with Windows® compatible software, Serial cable, 4 x C batteries, microphone wind screen, mini screwdriver, 120V AC adaptor, and case. See p. 112 for 220-240V Adaptors; 1 year warranty

CE

Type 2 integrating sound level meter with Octave and 1/3 Octave Band Real Time display

- 160x160 dot matrix backlit LCD
- Stores 12,280 records in SLM mode and 1024 points in 1/1 or 1/3 octave mode
- Transferred data to a PC to be analyzed using software and cable provided
- A, C, Flat weighting; Fast/Slow response time
- Detachable 0.52" (13.2mm) diameter condenser microphone and Tripod mount
- Real time clock with Year, Month, Day, Hour, Minute, and Second display
- Maintain noise level statistics for internal and external audits

SPECIFICATIONS

Applicable standards	ANSI S1.4 Type 2, EN IEC 60651, EN IEC 60804, and EN IEC 1260-1995
Accuracy	±1.5dB (ref 94dB @ 1kHz)
Measurement range / function	30dB to 130dB / La, Lc, Lp, Leq, LE, Lmax, Lmin
Frequency range	25Hz ~ 10kHz
Sound level meter display	Integrating SLM: Digital, 4 Digits with Bargraph
Real Time Analyzer display	Graphical, Bargraph with cursor
1/1- 1/3 Analyzer level range	30 to 130dB
1/1 Octave & 1/3 Octave	1/1 Octave band center frequencies: (9 bands); 1/3 Octave band center frequencies: (27 bands)
Signal output	AC output: 2 Vrms (at full scale); DC output: 10mVDC/dB
Power	Four type C size 1.5V batteries, External DC power: 6V, 1A
Dimensions/Weight	13.6x3.9x2.4" (345x100x60mm)/ 33.5oz (950g)

ORDERING

407790	N	Octave Band Sound Analyzer
407764-EXT		15ft (4.7m) Microphone Extension Cable
407744	N	94dB Sound Level Calibrator (see p. 110)
407766	N	94/114dB Sound Level Calibrator (see p. 110)
USB100		RS-232 to USB Adaptor

407355 Personal Noise Dosimeter Datalogger and Kit



407355-KIT-5
Dosimeter Kit includes five 407355 Dosimeters, 407766 Sound level calibrator, and carrying case

Complete with belt clip, clip-on 0.5" microphone with 2.6ft (0.8m) cable, software, 4 AAA batteries, mini screwdriver and carrying case; 1 year warranty

CE

Measure total sound exposure over an 8-hour period

- Perform OSHA and IEC Noise accumulation surveys
- Adjustable Criterion Level, Exchange Rate, and Threshold
- Optional 94/114dB calibrator to perform "before" and "after" calibration checks
- Ideal for personal/workplace accumulated noise exposure
- Bi-directional RS-232 with Windows® compatible software to control setup and retrieve stored events or analyze real time measurements. Software lists and graphs functions. Complete with 9 pin to 25 pin adaptor and RS-232 cable
- Datalogs up to 4500 readings when used as a sound level meter
- Stores up to 5 dosimeter surveys (Kit 407355-KIT-5 available). Data includes Start/Stop Time, %Dose, TWA, Peak flags, when used in the Dosimeter mode

SPECIFICATIONS

Standards	Meets ANSI S1.25 (1991) Type 2, ISO-1999, BS 402 (1983)
Range/Resolution	70 to 140dBA / 0.1dB (Frequency A Weighting)
Digital Display	LCD 0.01-9999%
Criterion/Threshold Level	80, 84, 85 or 90dB/ 70-90 (1db steps)
Response Rate/Exchange Rate	Fast or Slow/ 3, 4, 5 or 6 dB
High Level Detector/Peak Flag	115dB / 140dB
Battery Life	34 hrs
Event Storage	5 surveys
Dimensions/Weight	4.2x2.5x1.3" (106x64x34mm)/ 8oz (227g) incl. batteries

ORDERING

407355	N	Noise Dosimeter/Datalogger
407355-KIT-5		Noise Dosimeter/Datalogger Kit
407744	N	94dB Sound Level Calibrator (see p. 110)
407766	N	94/114dB Sound Level Calibrator (see p. 110)
USB100		PC to USB Adaptor

Rev Up Your Diagnostics

Measure RPM, surface speed, and revolution counts with Extech's wide range of tachometers. Models include contact, non-contact and combination models, as well as compact, stroboscope and panel-mount versions.



ACCESSORIES

461937	Reflective Tape - Ten reflective tape strips: 23x0.25" (584x6mm) ea. strip
461990	Contact Wheels - 2 sets of cone tip, flat tip, and spare wheel



461891 Contact Tachometer

Fast and accurate RPM and surface speed measurements

- Make contact measurements of rotating objects
- Measure linear surface speeds in ft/min or m/min using three accessory wheels provided
- Recalls Last/MAX/MIN values
- Complete with cone tip, flat tip and spare wheel for surface speed measurements, four 1.5V AA batteries, and carrying case



461893 Non-contact Photo Tachometer

Non-contact RPM measurements using visible light

- Make non-contact rpm measurements of rotating objects
- Use reflective tape on object to be measured and point the integral light beam
- Integral light beam has an ideal measurement range up to 6" (152mm) distance
- Readings updated every second
- Recalls Last/MAX/MIN values
- Complete with 23" (0.6m) reflective tape, four 1.5V AA batteries, and carrying case

SPECIFICATIONS	461891 N	461893 N
rpm	0.5 to 20,000	5 to 99,999
ft/min	0.2 to 6560	—
m/min	0.05 to 1999.9	—
Basic Accuracy	±0.05%rdg	±0.05%rdg
Max rpm Resolution	0.1rpm	0.1rpm
Laser	—	—
Temperature (IR)	—	—
CE approved	Yes	Yes
Dimensions	6.7x2.8x1.5" (170x27x37mm)	6.7x2.8x1.5" (170x27x37mm)
Weight	9.2oz (260g)	8.8oz (250g)
Warranty	1 year	1 year



461895 Combination Contact/Photo Tachometer

Combines both contact and non-contact models for use in all applications

- Characters on display reverse direction depending on contact or photo mode
- Uses visible light to read up to 6" (150mm) from target
- Memory/readings button holds last reading for 5 min and recalls min/max readings
- Complete with wheels for linear surface speed or rpm measurements, four 1.5V AA batteries, 23" (0.6m) reflective tape, and carrying case



461995 Combination Contact/Laser Photo Tachometer

Combines both contact and non-contact models for use in all applications

- Characters on display reverse direction depending on contact or photo mode
- Laser guided for greater distance non-contact measurements up to 6.5ft (2m)
- Memory/readings button holds last reading for 5 min and recalls MAX/MIN readings
- Complete with wheels for linear surface speed or rpm measurements, four 1.5V AA batteries, 23" (0.6m) reflective tape, and carrying case



RPM10 Combination Laser Tachometer + IR Thermometer

Photo/Contact Tachometer includes a non-contact IR Thermometer for surface temperature measurements

- Built-in IR thermometer with laser measures remote surface temperature on motors and rotating parts
- Fixed 0.95 emissivity, 6:1 distance to target ratio
- Non-contact Photo tachometer uses a Laser for greater measuring distance up to 6.5ft (2m)
- Contact tachometer for RPM and surface speed measurements
- Recalls Last/MAX/MIN values
- Characters on display reverse direction depending on mode
- Complete with tips/wheel, four 1.5V AA batteries, reflective tape, and carrying case

461895 N

Photo: 5 to 99,999 / Contact: 0.5 to 19,999
0.2 to 6560
0.05 to 1999.9
±0.05%rdg
0.1rpm
—
—
Yes
8.5x2.6x1.5" (216x66x38mm)
10.6oz (300g)
1 year

461995 N

Photo: 10 to 99,999 / Contact: 0.5 to 19,999
0.2 to 6560
0.05 to 1999.9
±0.05%rdg
0.1rpm
Yes
—
Yes
8.5x2.6x1.5" (216x66x38mm)
10.6oz (300g)
1 year

RPM10 N

Photo: 10 to 99,999 / Contact: 0.5 to 20,000
0.2 to 6560
0.05 to 1999.9
±0.05%rdg
0.1rpm
Yes
-4 to 600°F (-20 to 315°C)
Yes
8.5x2.6x1.5" (216x66x38mm)
10.6oz (300g)
1 year

SPECIFICATIONS

rpm
ft/min
m/min
Basic Accuracy
Max. rpm Resolution
Laser
Temperature (IR)
CE approved
Dimensions
Weight
Warranty

461920 Mini Laser Photo Tachometer Counter



CE



Measures the speed (RPM) of rotating objects and counts (revolution) of moving objects.

Non-contact RPM and Revolution count measurements to 99,999 rev

- Measure non-contact RPM readings of rotating objects by pointing the integral laser at the reflective tape placed on the object to be measured
- Large 5 digit LCD display with backlighting
- Rugged double molded housing with memory button for Last/MAX/MIN readings
- 1 year warranty
- Complete with 9V battery and reflective tape

SPECIFICATIONS

RPM range	2 to 99,999 rpm
Count range	1 to 99,999 rev (revolution)
Target Distance	1.6ft (500mm)
Basic Accuracy	±0.05%
Resolution	0.1rpm, 1 count
Dimensions/Weight	6.2x2.3x1.6" (160x60x42mm)/5.3oz (151g)

ORDERING

461920 N	Mini Laser Photo Tachometer Counter
461937	Spare reflective tape (23" each strip), 10pk



461700/461750 PocketTach® Mini Tachometers



CE

For rpm and surface speed measurements

- Ergonomically designed and pocket size housing with protective finger guard
- Hold button freezes displayed readings
- 1 year warranty
- Both meters include 9V battery; 461700 includes reflective tape; 461750 includes surface wheels
- **461750 Contact Tachometer** — Surface wheels measure linear surface speeds
- **461700 Non-contact Tachometer** — Uses reflective tape and integral light beam (measures up to 6"/152mm from target) to measure the speed (rpm) of a rotating object

SPECIFICATIONS	Model 461700	Model 461750
rpm (max res.)	10 to 99,999rpm (0.001)	10 to 10,000rpm (0.001)
ft/min (max res.)	—	3 to 6560ft/min (0.0001)
m/min	—	1 to 1999.9m/min
yd/min	—	1 to 5,000yd/min
Basic accuracy	±0.1%rdg	±0.1%rdg
Sampling Time	1sec>60rpm, >1sec>10 to 60rpm	1sec>60rpm, >1sec>10 to 60rpm
Dimensions/ Weight	4.9x2x1.3" (124x50x33mm)/ 4oz (114g)	5.9x2x1.3" (149x50x33mm)/ 5oz (142g)

ORDERING

461700 N	PocketTach® Mini Photo Tachometer
461750 N	PocketTach® Mini Contact Tachometer

461825 Combination Photo Tachometer/Stroboscope



Stroboscope to analyze rotating objects and Tachometer to measure rpms

- Course and fine flash rate adjustments to freeze and analyze rotating objects
- Unique display characters that reverse direction depending on function mode
- Large 0.4" (10mm) 5 digit LCD display and memory stores Last/MAX/MIN readings
- Complete with four 1.5V AA batteries, reflective tape, and case; 1 year warranty

SPECIFICATIONS	PHOTO TACHOMETER (RPM)	STROBOSCOPE (FPM/RPM)
Range	5 to 99,999	100 to 100,000
Accuracy	±0.1%rdg	±0.1%rdg
Sampling Time	1 Sec ≥ 60rpm;	1 Sec ≥ 60rpm;
Resolution	0.1rpm (<1,000rpm), 1rpm (≥1,000rpm)	0.1fpm (<1,000fpm), 1fpm (≥1,000fpm)
Dimensions/Weight	8.5x2.6x1.5" (215x65x38mm) / 10.6oz (300g)	±0.1%rdg

Ordering

461825	N	Combination Photo Tachometer/Stroboscope
461937		Spare reflective tape (23" each strip), 10pk

461830/461831 Digital StroboTach



Freeze motion and analyze rotating objects without contact

- Checks and analyzes motion and speed by simply aiming and synchronizing its flash rate (fpm) with a rotating object
- rpms on 4 digit LED display
- Flash/Speed Rate of 100 to 10,000fpm/rpm; Basic accuracy of ±0.05% rdg
- Duty Cycle of 5 to 30mins
- Tripod mount for stationary use
- Dimensions/Weight: 8.3x4.8x4.8" (211x122x122mm)/2.2lbs (1kg)
- Complete with 6ft (1.9m) power cord and handle; 1 year warranty

ORDERING

461830	N	Digital StroboTach 115VAC, 60Hz
461831	N	Digital StroboTach 220VAC, 50Hz
461834		Spare Xenon Lamp (est life 300hrs), 2pk

461950 1/8 DIN Panel Tachometer



Continuous & accurate readings from 5 to 99,990rpm

- Large LED display updates 1/sec (rpm<60)
- Unique design permits rpm measurements of a one hole gear or disk eliminating the need for special gears
- A pulse is measured when a ferrous object (stud) passes by a proximity sensor
- Choice of two sensor pickup types (both include 6ft/1.8m cable): Proximity sensor: 0.1" (3mm) target distance, range up to 36,000rpm (600Hz); Photoelectric sensor: 0.4" (10mm) target distance, range up to 6000rpm (100Hz)
- 1 year warranty

SPECIFICATIONS

rpm	5 to 99,990rpm
Basic accuracy	±0.05%
Resolution	0.1rpm (5 to 1000rpm), 1rpm (1000 to 9999rpm), 10rpm (10,000rpm to 99,990rpm)
Power	115V or 230V AC; 50/60Hz
Dimensions/Weight	Bezel 3.8x1.9x2.4" (96x48x60mm); Panel cutout 3.6x1.8" (92x45mm) Meter 3.6x3.5x1.7" (92x90x42mm)/ 14oz (397g)
Sampling Time	1sec>60rpm, >1sec>10 to 60rpm
Dimensions/ Weight	4.9x2x1.3" (124x50x33mm)/ 4oz (114g)



461957
Photoelectric

461955
Proximity



ORDERING

461950	N	1/8 DIN Panel Mount Tachometer
461955		Proximity Sensor, max. 36,000rpm
461957		Photoelectric Sensor, max. 6000rpm

HD350 Pitot Tube Anemometer + Differential Manometer



Includes Windows® compatible software with cable, 9V battery, pitot tube with two 33.5" (85cm) connection hoses, 100V-240V universal AC Adaptor, and hard carrying case; 3 year warranty

Pitot Tube measures Air Velocity/Airflow in difficult-to-reach or tight locations where a vane anemometer won't fit

- Simultaneous display of Pressure, Air Velocity or Air Flow plus Temperature
- Max/Min/Avg, Relative, time stamp, Data Hold, and Auto power off functions
- Large LCD display with backlighting
- Zero function for offset correction or measurement
- Store/Recall up to 99 readings in each mode; USB port; includes software

SPECIFICATIONS	RANGE	MAX RESOLUTION	BASIC ACCURACY
Pressure			
psi	0.7252psi	0.0001psi	±0.3%FS
mbar	50.00mbar	0.01mbar	±0.3%FS
inH ₂ O	20.07inH ₂ O	0.01inH ₂ O	±0.3%FS
mmH ₂ O	509.8mmH ₂ O	0.01mmH ₂ O	±0.3%FS
Pa	5000Pa	1Pa	±0.3%FS
Linearity/Hysteresis	±0.29FS		
Maximum Pressure	10psi		
Air Velocity/Flow			
ft/min	200 to 15733	1	±1% FS
m/s	1 to 80.00	0.01	±1% FS
km/h	3.5 to 288.0	0.1	±1% FS
MPH	2.25 to 178.66	0.01	±1% FS
knots	2.0 to 154.6	0.1	±1% FS
CFM/CMM	0 to 99,999	0.001	±1% FS
Temperature	32.0 to 122.0°F (0 to 50°C)	0.1°	±3°F/1.5°C
Dimensions/Weight	Meter: 8.2 x 2.9 x 1.9" (210 x 75 x 50mm) / 12oz (340g); Pitot Tube: 15.4 x 7.7" (390 x 195mm); Diameter 0.32" (8mm) / 7.2oz (204g)		

ORDERING

HD350	Pitot Tube Anemometer + Differential Manometer
-------	--

SDL700 Pressure Meter/Datalogger



Includes 6 x AA batteries, SD memory card, and hard carrying case; 3 year warranty. Optional AC adaptors.

Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC

- Accepts interchangeable transducers with ranges of 30, 150, 300psi (Transducers sold separately)
- Meter automatically senses plug-in transducer's range and calibration
- Selectable data sampling rate: 1 to 3600 seconds
- Stores 99 readings manually and 20M readings via 2G SD card; Built-in PC interface
- Large backlit dual LCD
- MIN/MAX, Data Hold, and Auto power functions

SPECIFICATIONS	30psi	150psi	300psi
bar	0.002 to 2	0.01 to 10	0.02 to 20
psi	0.02 to 29	0.2 to 145	0.2 to 290
kg/cm ²	0.002 to 2.040	0.01 to 10.19	0.02 to 20.40
mmHg	2 to 1500	10 to 7500	20 to 15000
inHg	0.05 to 59.05	0.2 to 295.2	0.5 to 590.5
mH ₂ O	0.02 to 20.40	0.1 to 101.9	0.2 to 204.0
inH ₂ O	1 to 802	5 to 4010	10 to 8020
atm	0.002 to 1.974	0.01 to 9.87	0.02 to 19.74
hPA	2 to 2000	10 to 10000	20 to 20000
kPA	0.2 to 200.0	1 to 1000	2 to 2000
Dimensions/Weight	Meter: 7.2x2.9x1.9" (182X73X48mm)/ 17.3oz (490g)		

ORDERING

SDL700 N	Pressure Meter/Datalogger
PT30	30psi Pressure Transducer
PT150	150psi Pressure Transducer
PT300	300psi Pressure Transducer
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

HD700 Series Differential Pressure Manometers



Low Range/High Resolution Gauge or Differential Pressure

- Three models to choose from: Model HD700 (± 2 psi range), Model HD750 (± 5 psi range), and Model HD755 (± 0.5 psi range)
- 11 selectable units of measure
- MAX/MIN recording and Relative time stamp
- Data Hold and Auto power off
- Zero function for offset correction or measurement
- Large LCD display with backlighting
- USB port includes PC software
- 3 year warranty
- Complete with 9V battery, Windows® compatible software with USB cable, 100-240V Universal AC adaptor, connection hose, built-in stand, and hard carrying case

SPECIFICATIONS	HD700	HD750	HD755
psi	2psi (0.001psi)	5psi (0.001psi)	0.5psi (0.001psi)
inH ₂ O	55.40inH ₂ O (0.01inH ₂ O)	138.3inH ₂ O (0.1inH ₂ O)	13.85inH ₂ O (0.01inH ₂ O)
mbar	137.8mbar (0.1mbar)	344.7mbar (0.1mbar)	34.47mbar (0.01mbar)
kPa	13.78kPa (0.01kPa)	34.47kPa (0.01kPa)	3.447kPa (0.001kPa)
inHg	4.072inHg (0.001inHg)	10.18inHg (0.01inHg)	1.018inHg (0.001inHg)
mmHg	103.4mmHg (0.1mmHg)	258.5mmHg (0.1mmHg)	25.85mmHg (0.01mmHg)
ozin ²	32ozin ² (0.01ozin ²)	80ozin ² (0.01ozin ²)	8.00ozin ² (0.01ozin ²)
ftH ₂ O	4.616ftH ₂ O (0.001ftH ₂ O)	11.53ftH ₂ O (0.01ftH ₂ O)	1.154ftH ₂ O (0.001ftH ₂ O)
cmH ₂ O	140cmH ₂ O (0.1cmH ₂ O)	350.1cmH ₂ O (0.1cmH ₂ O)	2.59cmH ₂ O (0.01cmH ₂ O)
kgcm ²	0.140kgcm ² (0.001kgcm ²)	0.351kgcm ² (0.001kgcm ²)	0.035kgcm ² (0.001kgcm ²)
bar	0.137bar (0.001bar)	0.344bar (0.001bar)	0.034bar (0.001bar)
Basic Accuracy	$\pm 0.3\%$ FS	$\pm 0.3\%$ FS	$\pm 0.3\%$ FS
Dimensions/Weight	Meter: 8.2x2.9x1.9" (210x75x50mm)/ 9.8oz (280g)		

ORDERING

HD700	N	Differential Pressure Manometer (2psi)
HD750	N	Differential Pressure Manometer (5psi)
HD755	N	Differential Pressure Manometer (0.5psi)

407910 Heavy Duty Differential Pressure Manometer



Wide range dual input with multiple units and RS-232 interface

- Dual differential inputs with internal sensors
- Wide (± 802 inches of water) measurement range with high resolution to 0.5 inch
- Displays 8 types of pressure units
- Zero function for offset measurements
- Data Hold, Auto power off, and MAX/MIN
- Built-in RS-232 PC interface — optional 407001 Data Acquisition software or 380340 datalogger (see p. 106 for details)
- 3 year warranty
- Complete with 2 quick-disconnect fittings, 9V battery, protective holster with stand, and case

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
psi	± 29 psi	0.02psi	$\pm 1\%$ FS
mbar	± 2000 mbar	1mbar	$\pm 2\%$ FS
kg/cm ²	± 2.040 kg/cm ²	0.001kg/cm ²	$\pm 1\%$ FS
mmHg	± 1500 mmHg	1mmHg	$\pm 1\%$ FS
inHg	± 59.05 inHg	0.05inHg	$\pm 1\%$ FS
mH ₂ O	± 20.40 mH ₂ O	0.01mH ₂ O	$\pm 1\%$ FS
inH ₂ O	± 802.0 inH ₂ O	0.5inH ₂ O	$\pm 1\%$ FS
Atmosphere	± 1.974 atm	0.001atm	$\pm 1\%$ FS
Dimensions/Weight	Meter: 7x2.9x1.3" (178x74x33mm)/12oz (350g)		

ORDERING

407910	N	Heavy Duty Differential Pressure Manometer
156119		117VAC Adaptor
409997		Soft Vinyl Pouch Carrying Case

HDV600 Series High Definition VideoScope Inspection Cameras



Narrow diameter cameras with 5.7" High Definition Color LCD Monitor deliver high image and video resolution on large color display

- The HDV600 Series VideoScope has various camera probes to fit your application needs. Choose from a range of sizes with articulating or wireless features.
- 5.7" color LCD TFT — high definition 640x480 pixels resolution
- Waterproof (IP67) meter and camera head with cable
- Bright white LED lamps with dimmer to illuminate viewed object
- Glare-free close-up field of view and 6" (15.2cm) minimum focus distance
- 2G SD memory card included to store >14,600 images
- Video recording (up to 4 hours) with Voice annotation
- Video and images can be transferred via the SD card, USB output or AV out
- An optional wireless transmitter (HDV-WTX) connects to your camera cable and allows you to transmit video up to 100ft (30m)
- 1 year warranty
- Complete with SD memory card, 3.7V rechargeable Li-Polymer battery, AC adaptor, USB and AV cables, camera with cable, and case



Camera Tip features built-in LED lights.



HDV-WTX Wireless Transmitter allows measurements up to 100ft (30m) away



Model HDV610

- VideoScope with 5.5mm diameter camera head (1m flexible cable)

MODEL HDV620

- VideoScope with 5.8mm diameter camera head (1m semi-rigid cable retains configured shape)

Model HDV640 & HDV640W

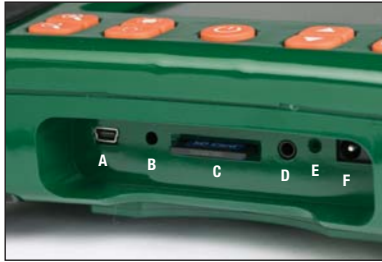
- VideoScope with 6mm diameter camera head (1m semi-rigid cable retains configured shape)
- Easy knob control of the articulating camera tip facilitates viewing in obstructed areas where standard camera tips cannot access.
- 320° camera probe rotation (from straight position, 160° left and 160° right)

MODEL HDV640W

- Built-in wireless transmitter in camera cable controller allows you to transmit video up to 32ft (10m) from the measurement point to your monitor



Articulating (6mm diameter) camera tip adjusts up to 320° viewing angle.



- A. USB input
- B. Microphone input
- C. SD card slot
- D. AV out
- E. Reset switch
- F. Power adaptor input



Features a 5.7" (144mm) high definition color LCD monitor



HDV640 High Definition Articulating VideoScope (6mm diameter camera/1m semi-rigid cable)

ORDERING

Video Inspection Camera Kits

HDV610	High Definition VideoScope (5.5mm diameter camera/1m flexible cable)
HDV620	High Definition VideoScope (5.8mm diameter camera/1m semi-rigid cable)
HDV640	High Definition Articulating VideoScope (6mm diameter camera/1m semi-rigid cable)
HDV640W	High Definition Wireless Articulating VideoScope (6mm diameter camera /1m semi-rigid cable)

Video Inspection Monitor (order camera head separately from accessories list below)

HDV600	High Definition VideoScope (meter only)
--------	---

Optional Camera Heads

HDV-TX1	6mm Articulating VideoScope Camera Head (1m Semi-Rigid Cable)
HDV-WTX1	6mm Wireless Articulating VideoScope Camera Head (1m Semi-Rigid Cable)
HDV-TX2	6mm Articulating VideoScope Camera Head (2m Semi-Rigid Cable)
HDV-WTX2	6mm Wireless Articulating VideoScope Camera Head (2m Semi-Rigid Cable)
HDV-4CAM-1FM	4mm VideoScope Camera Head with Macro lens (1m Flexible Cable)
HDV-5CAM-1FM	5.5mm VideoScope Camera Head with Macro lens (1m Flexible Cable)
HDV-5CAM-3F	5.5mm VideoScope Camera Head with long depth of field (3m Flexible Cable)
HDV-5CAM-3FM	5.5mm VideoScope Camera Head with Macro lens (3m Flexible Cable)
HDV-5CAM-10F	5.5mm VideoScope Camera Head with long depth of field (10m Flexible Cable)
HDV-5CAM-1RM	5.8mm VideoScope Camera Head with Macro lens (1m Rigid Cable)
HDV-5CAM-3R	5.8mm VideoScope Camera Head with long depth of field (3m Rigid Cable)
HDV-5CAM-3RM	5.8mm VideoScope Camera Head with Macro lens (3m Rigid Cable)
HDV-25CAM-10G	25mm VideoScope Camera Head (10m Fiberglass Cable)
HDV-25CAM-30G	25mm VideoScope Camera Head (30m Fiberglass Cable)
HDV-WTX	Wireless Transmitter
HDV-PC	Spare Patch Cable for HDV Series



Drop proof and Waterproof housing meets IP67 standards

Unlimited Inspection Uses:

- Home:** Mold, insect infestation, electrical wire or plumbing
- HVAC:** Ducts, motors, compressors, air movers, and chillers
- Automotive:** Engines, transmissions, motors, electronics
- Government:** Safety and security
- Industrial:** Welding, process equipment, gears, molding machines
- Aerospace:** Aircraft, debris, cracks or other damages
- And more...

BR200/BR250 Video Borescope/Wireless Inspection Cameras



3.5" Color Detachable Wireless LCD Monitor can be viewed from a remote location up to 32ft (10m) from measurement point

- Captured video with date/time stamp can be played back on the wireless monitor or on any monitor with a video input jack
- Video and images can be transferred to a PC via microSD card or USB cable and viewed using Windows® Multimedia Player
- Waterproof (IP67) flexible gooseneck retains configured shape
- NTSC operation with menus in 10 languages
- Close-up field of view; 1 year warranty
- Includes 4 AA batteries, rechargeable display battery, memory card with adaptor, USB cable, extension tools (mirror, hook, magnet) video interconnect cable, AC adaptor, magnetic base stand, and hard case
- **Model BR200** — 17mm diameter camera head with built-in two bright LED lamps with dimmer and 39" (1m) flexible gooseneck cable
- **Model BR250** — 9mm diameter camera head with built-in four bright LED lamps with dimmer and 36" (0.9m) flexible gooseneck cable



BRD10 Wireless USB Video Receiver
Optional Wireless USB Video Receiver allows user to stream live video from your Video Borescope to a PC and it can also be viewed remotely via VOIP connection.



Detachable wireless 3.5" color display can be viewed remotely from up to 32ft (10m). Camera features built-in LED lights.

SPECIFICATIONS

Camera Pixels	BR200: 712x486 (NTSC) / BR250: 640 x 480 (NTSC)
Transmission Frequency/ Range	2468MHz/ 32ft (10m) unobstructed view
Camera Viewing direction	BR200: Viewing Angle 50° / BR250: Viewing Angle 45°
Camera Viewing distance	5.9 to 9.8" (15 to 25cm)
LCD Screen Type/ Pixels	3.5" TFT/ 320 x 240
Monitor Video Output Level	0.9 to 1.3V@75Ω
Monitor Video/Image Resolution	960 x 240 (AVI format)/640 x 480 (JPEG format)
Operating/Charge Time	1.5hrs/3hrs
Dimensions/Weight	Camera: 7.3x5.7x1.6" (186x145x41mm)/18.7oz (530g) Monitor: 3.9x2.7x1" (100x70x25mm)/4.9oz (140g)

ORDERING

BR200	Flexible Video Borescope (17mm diameter/1m cable)
BR250	Flexible Video Borescope (9mm diameter/1m cable)
BRD10	Wireless USB Video Receiver
BR200-EXT	Borescope Extension Cable for BR250 (19mm diameter/0.9m cable)
BR-4CAM	4.5mm Borescope Camera Head with 1m Cable
BR-5CAM	5.5mm Borescope Camera Head with 1m Cable
BR-9CAM	9mm Borescope Camera Head with 1m Cable
BR-9CAM-2M	9mm Borescope Camera Head with 2m Cable
BR-9CAM-5M	9mm Borescope Camera Head with 5m Cable
BR-17CAM	17mm Borescope Camera Head with 1m Cable
BR-17CAM-2M	17mm Borescope Camera Head with 2m Cable
BR-17CAM-5M	17mm Borescope Camera Head with 5m Cable
UA100-BR	Universal AC Adaptor

Note: Recommended up to two BR200-EXT connected to BR200 and BR250 to maintain resolution)

BR100 Video Borescope Inspection Camera



17mm camera diameter and 2.4" Color TFT LCD Monitor with video output for viewing on any monitor with a video input jack

- 39" (1m) flexible gooseneck cable retains configured shape
- Mini water-proof (IP67) camera head for high resolution viewing
- Two bright LED lamps with dimmer to illuminate viewed object
- Display detaches for easy storage
- 1 year warranty
- Complete with 4 AA batteries, extension tools (mirror, hook, magnet), video output jack, and hard case
- Optional BR200-EXT extension cable & accessories available

SPECIFICATIONS

Camera	
Viewing direction	Viewing Angle 50°
Focus distance from object	5.9" to 9.8" (15 to 25cm)
Minimum bend radius	2.36" (60mm)
Dimensions/Weight	7.3 x 5.7 x 1.6" (186 x 145 x 41mm)/18.7oz (530g)
Monitor	
LCD Screen Type	2.4" TFT
Pixels	480 x 234
Operating	1.5 hours
Dimensions/ Weight	3.9 x 2.7 x 1.8" (100 x 70 x 30mm)/ 4.9oz (140g)

ORDERING (SEE P. 124 FOR CAMERA HEADS WITH LONGER CABLE LENGTHS)

BR100	Flexible Video Borescope (17mm diameter/1m cable)
BR-4CAM	4.5mm Borescope Camera Head with Cable
BR-5CAM	5.5mm Borescope Camera Head with Cable
BR-9CAM	9mm Borescope Camera Head with Cable
BR-17CAM	17mm Borescope Camera Head with Cable
BR200-EXT	Borescope Extension Cable for BR250 (19mm diameter/0.9m cable)

(Note: Recommended up to two BR200-EXT connected to BR250 to maintain resolution)

BR50 Video Borescope/Camera Tester



17mm camera diameter and 2.4" Color TFT LCD Monitor also tests installed surveillance cameras for correct target alignment

- 17mm diameter camera head with 39" (1m) flexible gooseneck cable retains configured shape
- Mini water-proof (IP57) camera head for high resolution viewing
- Four LED lamps with five brightness levels illuminate the viewed object
- Close-up field of view with 480 x 234 pixel display
- Automatically detects NTSC and PAL cameras
- Switches to standby mode when no input is connected
- Battery can be recharged via the built-in USB port using the included AC adaptor/charger or a USB port on your PC
- 1 year warranty
- Complete with rechargeable Lithium battery and Universal AC adapter/charger with USB cable



ORDERING

BR50	Video Borescope/Camera Tester
BRC-17CAM	17mm Borescope Camera Head with Cable

412400 Multifunction Process Calibrator



Precision source and measure for thermocouples, mA, mV and V devices

- Source 0 to 24mA with 0.01mA resolution
- Measure 0 to 50mA (0.1mA resolution)
- Select Type K, J, or T thermocouple for precision calibrations in °F/°C or mV
- Output 0 to 1999mV or 0 to 10.00V
- Measure 0 to 19.99V
- Single/continuous step function for Voltage and Current
- Self-contained 24V loop power supply drives current loads up to 1000Ω
- Memory for 5 user programmable output values of each type for fast calibrations
- 1 year warranty
- Complete with 6 AA batteries, test leads, detachable alligator clips, temperature calibration cable with spade lug connector, carrying case, neckstrap, and Universal AC adaptor

SPECIFICATIONS	DC SOURCE	DC MEASURE	BASIC ACCURACY
Current	0 to 24mA, -25% to +125%	0 to 50mA, -25% to +230%	±(0.075%+1d)
Voltage	0 to 10V	0 to 19.99V	±(0.075% + 1d)
Type J	-58 to 1830°F (-50 to 1000°C)	-58 to 1830°F (-50 to 1000°C)	±(0.15% + 1.8°F or 1°C)
Type K	-58 to 2498°F (-50 to 1370°C)	-58 to 2498°F (-50 to 1370°C)	±(0.15% + 1.8°F or 1°C)
Type T	-184 to 752°F (-120 to 400°C)	-184 to 752°F (-120 to 400°C)	±(0.15% + 1.8°F or 1°C)
Loop Power	24V		±(10μV ± 1d)
Max. Load	1000Ω @ 24mA		
Dimensions/Weight	3.8 x 4.7 x 2.0" (96 x 118 x 45mm)/12oz (340g)		

ORDERING

412400 **N** Multifunction Process Calibrator

433201 Multi-Type Calibrator Thermometer



Source and measure 8 thermocouple type devices J, K, T, E, C, R, S, and N

- Five stored calibration values for fast calibrations
- Large LCD display built into adjustable cover
- Versatile thermometer measures over a wide temperature range
- Displays output in terms of mV or °F/°C temperature based on built-in thermocouple tables
- 1 year warranty
- Complete with Type K Thermocouple Calibration Cable, Copper calibration cable, 9V NiCad rechargeable battery, neckstrap, Universal AC adaptor/recharger, and case

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Type J	-58 to 1830°F (-50 to 1000°C)	0.1°/1°	0.15% rdg ±1°
Type K	-58 to 2498°F (-50 to 1370°C)	0.1°/1°	0.15% rdg ±1°
Type T	-184 to 752°F (-270 to 400°C)	0.1°/1°	0.15% rdg ±1°
Voltage	-5.00mV to +55.00mV		10μV ±2d
Dimensions/Weight	3.5x6.6x1" (88x168x26mm)/ 11.6oz (330g)		

ORDERING

433201 **N** Calibrator Thermometer (w/115V AC adaptor)
 433202-220 **N** Calibrator Thermometer (w/220V AC adaptor)
 433202-240 **N** Calibrator Thermometer (w/240V AC adaptor)

Order thermocouple probes from p. 40

412300A/412355A Current & Voltage Calibrators/Meters



“Source” for calibrating process devices and measuring DC process signals

- LCD displays readings in mA, % of the 0 to 24mA range or as mV in voltage ranges
- Five stored calibration values for fast calibrations
- 1 year warranty
- Complete with 9V battery, calibration cable with spade lug terminals, carrying case, neckstrap and 100V-240V AC Universal Adaptor (50/60Hz)
- **Model 412355A** Current + Voltage Calibrator provides adjustable 0 to 24mA and 0 to 20V calibration source
- **Model 412300A** Current Calibrator provides 0 to 24mA output displayed as mA or % and provides 24VDC power to measure a two-wire current loop

SPECIFICATIONS

Source	Output 0 to 24mA current for loads up to 1000 ohms; Output 0 to 20V (412355A only)	
Measure	0 to 50mA current signal; 0 to 19.99V (412355A only)	
Power/Measure	Provides power (24VDC) to loop & measures current (412300A only)	
Input/Output	Ranges and Display	Resolution
	-25.0 to 125.0% (representing 0 to 24mA)	0.1%
	0 to 19.99mA	0.01mA
	0 to 24.0mA	0.1mA
	0 to 1999mV	1mV
	0 to 20.00V	10mV
Accuracy	0.075% ±1 digit	
Dimensions/Weight	3.8x4.2x1.8" (96x108x45mm) folded/ 12oz (340g)	

ORDERING

412300A N	Current Calibrator/Meter
412355A N	Current & Voltage Calibrator/Meter

412440-S Calibration Source Checker



Easy to use pocket checker for simulating Current Loops

- Pocket Checkers are easy to use and provide a quick and easy way for checking calibration of meters or controllers
- Instantly determine if your device needs calibration or if sensor needs to be replaced
- Sources three discrete current levels: 4mA, 12mA and 20mA
- Bright red LEDs indicate simulation output or battery status
- Accurate to 0.1mA
- Overload indication when load exceeds 240Ω
- Compact case features push button output selector switch
- Ideal for checking calibration and as a current source for setting up engineering units on a process indicator or controller
- Dimensions/ Weight: 3.5x2.3x1" (89x58.4x25.4mm)/ 10oz (283.5g)
- 1 year warranty

ORDERING

412440-S N	Calibration Source Checker
-------------------	----------------------------

Perfect Timing

When is a stopwatch more than a stopwatch? When it is helping protect the lives of athletes. Extech's exclusive HeatWatch with built-in heat index alarm is fast becoming standard-issue safety equipment for high school and college athletics coaches around the U.S. as a key part of new policies to monitor against heatstroke. Trust Extech for sports timing, industrial process optimization—and keeping cool.



HW30 Humidity/ Thermometer Stopwatch

Digital UP/DOWN timer displays Temperature, Humidity, and Heat Index

- User programmable Heat Index alarm
- Stopwatch/chronograph mode with 1/100th second resolution
- Fastest/Slowest/Average Lap recall
- 99 lap counter with 30 lap/split memory
- 10 hour countdown timer with audible beeper warning for the last 5 seconds
- Programmable alarm
- Calendar mode displays day, month, and date
- 12 or 24 hour clock operation
- Complete with 39" (1m) lanyard and one 3V CR2032 battery

SPECIFICATIONS

SPECIFICATIONS	HW30 N
Timing capacity	9hrs, 59mins, and 59secs
Accuracy	±5 seconds/day
Alarm	Yes
Countdown Timer	Yes
Lap Memory	30 laps
Heat Index	70 to 122°F (22 to 50°C)
Temperature	14 to 122°F (-10 to 50°C)
Humidity	1 to 99%
CE approved	Yes
Dimensions	3.1x2.6x0.8" (79x66x21mm)
Weight	3oz (85g)
Warranty	1 year



365510 Stopwatch/ Clock

Digital Stopwatch plus Calendar and Alarm

- Stopwatch/Chronograph mode with 1/100th second resolution
- 12 or 24 hour clock operation
- Programmable alarm with an hourly chime
- Split time and two competitor timer
- Calendar displays day, month, and date
- Water resistant housing is complete with LR44 battery and 39" (1m) neckstrap



365515 Stopwatch/ Clock with Backlit display

Large backlit display feature — perfect for viewing in dimly lit area

- 1/100th second resolution for 30mins
- 1 second resolution up to 24 hours
- 12 or 24 hour clock format
- Calendar displays day, month and date
- Programmable alarm and hourly chime setting
- Water resistant housing is complete with LR44 battery and 39" (1m) neckstrap



365535 Decimal Stopwatch/Clock

User-selectable resolution of 1/100th of a second, 1/1000th of a minute and 1/100,000th of an hour
Large triple display with adjustable contrast

- 1/100th second precision
- 500 memory records of Split and Lap times
- Calendar displays day, month and date
- Time of day with daily alarm
- 12 or 24 hour clock format
- 3 Mode Countdown timer: count down stop, count down repeat, count down then count up
- Stroke measurement
- Pacer from 5 to 240 beeps per minute
- Water resistant housing
- Complete with CR2032 lithium battery and 39" (1m) neckstrap

365510 N

23hrs, 59mins and 59.99secs
±3 seconds/day
Yes
—
—
—
—
Yes
2.3x2.8x0.5" (57x70x15mm)
2oz (50g)
1 year

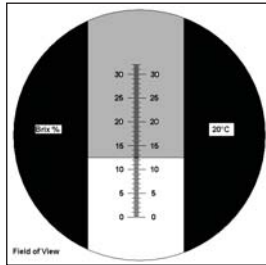
365515 N

23hrs, 59mins and 59.99secs
±3 seconds/day
Yes
—
—
—
—
Yes
2.3x2.8x0.5" (57x70x15mm)
2oz (50g)
1 year

365535 N

19hrs, 59mins and 59.99secs
±5 seconds/day
Yes
3 Modes
500 laps
—
—
—
Yes
2.5x3.2x0.8" (64x81x20mm)
2.7oz (77g)
1 year

RF Series Portable Brix Refractometers



Scale view through eyepiece

Measure the concentration of Sugar, Salt or industrial cutting/cooling lubricants

- Accurate, easy to operate refractometers with simple to read scales
- Automatic Temperature Compensation (RF11, RF12, RF15 and RF20 models)
- Requires only 2 or 3 drops of solution
- The prism and lens with a simple focus adjustment provide repeatable results
- Complete with case, calibration screwdriver, and calibration solution; 1 yr warranty

Sucrose (RF10, RF11, RF15, RF16, and RF18)

- Measure the concentration of sugar in fruit juice and industrial fluids

Brix (RF12 and RF18)

- Maintain proper lubricant cooling concentration to extend equipment life

Salinity (RF20)

- Measures the concentration of dissolved salt in water

General Purpose Brix (RF30)

- Triple Range: 0 to 42% Brix, 42 to 71% Brix, 71 to 90% Brix

SPECIFICATIONS	TYPE	RANGES	RESOLUTION	ACCURACY
RF10	Sucrose	0 to 32% Brix	0.2	±0.2%
RF11	Sucrose (ATC)	0 to 10% (10 to 30°C)	0.1	±0.1%
RF12	Lubricants/Cutting fluids (ATC)	0 to 18% Brix (10 to 30°C)	0.2	±0.2%
RF15	Sucrose (ATC)	0 to 32% Brix (10 to 30°C)	0.2	±0.2%
RF16	Sucrose	0 to 10% Brix	0.1	±0.1%
RF18	Brix (Lubricants)	0 to 18% Brix	0.1%	±0.2%
RF20	Salt (ATC)	0 to 100ppt (10 to 30°C) 1.000 to 1.070 Specific Gravity	1ppt 0.001	±0.1‰ ±0.001
RF30	Triple Range General Service	0 to 42% Brix, 42 to 71% Brix, 71 to 90% Brix	0.2	±0.2%

ORDERING

RF10	0 to 32% Brix Refractometer - Dims/Wt: 6.6x1.3x1.3" (168x32x32mm)/ 3.2oz (91g)
RF11	0 to 10% Brix Refractometer with ATC - Dims/Wt: 7.5x1.6x1.2" (190x40x30mm)/ 6.5oz (185g)
RF12	0 to 18% Brix Refractometer with ATC - Dims/Wt: 6.7x1.6x1.2" (170x41x31mm)/ 3.2oz (91g)
RF15	0 to 32% Brix Refractometer with ATC - Dims/Wt: 6.3x1.4x1.4" (159x35x35mm)/ 7oz (200g)
RF16	0 to 10% Brix Refractometer - Dims/Wt: 7.5x1.6x1.2" (190x40x30mm)/ 6.5oz (185g)
RF18	0 to 18% Brix Refractometer - Dims/Wt: 6.7x1.6x1.2" (170x41x31mm)/ 3.2oz (91g)
RF20	Salinity Refractometer with ATC - Dims/Wt: 7.6x1.5x1.5" (194x38x38mm)/ 8oz (227g)
RF30	Triple Range General Service (0 to 90% Brix) Refractometer - Dims/Wt: 7.9x1.5x1.1" (200x38x28mm)/ 21.86oz (620g)

RF40/RF40C/RF41 Battery Coolant/ Glycol Refractometer



Measure the % of Ethylene Glycol and Propylene Glycol

- Measures the freezing point of automotive coolants plus battery charge condition
- Provide accurate and repeatable measurements of % Ethylene Glycol and Propylene Glycol and °F on easy to read scale
- Automatic Temperature Compensation
- Requires only 2 or 3 drops of solution
- Complete with case, calibration screwdriver, and calibration solution; 1 yr warranty

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Propylene Glycol freeze point	RF40: -60°F (63%) to 32°F (12%) RF41: -50°C to 0°C	2°F (1%) 1°C	±5°F (2%)
Ethylene Glycol freeze point	RF40: -60°F (59%) to 25°F (16%) -51 to 0°C (-60 to 32°F) RF41: -50°C to 0°C	2°F (1%) 1°C/2°F 1°C	±5°F (2%)
Specific Gravity of Battery Acid	RF40/RF41: 1.15 to 1.30	0.01	
Dimensions/Weight	6.5x1.5x1.5" (165x38x38mm)/ 7oz (200g)		

ORDERING

RF40	Battery Coolant/Glycol Refractometer w/ATC (°F)
RF41	Battery Coolant/Glycol Refractometer w/ATC (°C)

FHT200 Fruit Hardness Tester



Penetrometer measures fruit ripeness to improve fruit quality, harvest, storage, and product transportation time

- Four Penetrometer tips for large/hard and small/soft fruits
- Tension or Compression, Peak hold and Zero functions
- Measures in lbs, kg, and Newtons
- Positive/Reverse display for easy readability
- Large LCD with back light feature
- PC interface
- Optional software available (407001)
- 1 year warranty
- Complete with four (3mm, 5mm, 8mm, 11mm) Penetrometer Tips, six AA 1.5V batteries, and hard carrying case; Optional AC adaptor

SPECIFICATIONS

Range	44.10lbs, 20kg, 196.10 Newtons
Accuracy	±(0.5%)
Resolution	0.01lbs, 0.01kg, 0.05 Newtons
Minimum Display	0.07lbs, 0.02kg, 0.3 Newtons
Display	5 digits, 0.63" (16mm) LCD display
Update Rate	Fast mode 0.2 secs; Slow mode 0.6 secs.
Full scale deflection	-0.4mm
Transducer type	Load cell
Peak Hold	Freezes Max reading on display
Dimensions	8.5 x 3.5 x 1.8" (215 x 90 x 45mm)
Weight	1.4 lbs (650g)

ORDERING

FHT200	Fruit Hardness Tester
407001	Data Acquisition software and cable
407001-USB	USB adaptor for 407001
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

CG204 Coating Thickness Tester



Measuring the thickness of automotive paint

Automatic recognition for ferrous and non-ferrous substrates

- Conforms to GB/T 4956-1985, GB/T 4957-1985, JB/T 8393-1996, JJG-889-95, and JJG 818-93
- Magnetic induction for ferrous substrates
- Eddy current measurement for non-ferrous substrates
- Two measuring modes (Single and Continuous) and Working modes (Direct and Group)
- Memory stores 400 readings: 80 Direct and 320 Group
- User adjustable high/low alarms, Min/Max/Average, One or two point calibration
- USB interface includes software
- 1 year warranty
- Complete with two AAA batteries, USB cable, software, Calibration Iron, Calibration Aluminum, Reference Films, and carrying case

SPECIFICATIONS

	FERROUS PROBE	NON-FERROUS PROBE
Working Principle	Magnetic Induction	Eddy Current
Measuring Range	0 to 1250µm; 0 to 49mils	0 to 1250µm; 0 to 49mils
Basic Accuracy	±3%	±3%
Resolution	0.1µm (0.004mils)	0.1µm (0.004mils)
Minimum Curvature Radius	1.5mm (59.06mils)	3mm (118.1mils)
Minimum Diameter	7mm (275.6mils)	5mm (196.9mils)
Minimum Thickness	0.5mm (19.69mils)	0.3mm (11.81mils)
Dimensions/Weight	4.7 x 2.4 x 1.25" (120 x 62 x 32mm) / 6.17oz (175g)	

ORDERING

CG204	Coating Thickness Tester
CG204-REF	Replacement Reference Films for CG204 (10 sets)

Tested Tough In the Field

When the U.S. Environmental Protection Agency responded to the Gulf of Mexico oil spill, ExStik dissolved oxygen meters were there helping to ensure marine life was not threatened.



ACCESSORIES

EC-84-P	84µS Conductivity Standard (2 bottles/1 pint ea)
EC-1413-P	1413µS Conductivity Standard (2 bottles/1 pint ea)
EC-12880-P	12880µS Conductivity Standard (2 bottles/1 pint ea)
PH103	Tripak Buffer pouches
PH105	pH ExStik® Electrode Module
RE305	ORP ExStik® Electrode Module
EC405*	ExStik® II Conductivity Cell Module for EC400
EC505*	ExStik® II pH/Conductivity Cell Module for EC500
DO605*	ExStik® II Dissolved Oxygen Module for DO600
DO603	Membrane Kit for DO600/DO605
FL705*	ExStik® II Fluoride Module for FL700
FL704	TISAB reagent tablets for FL700 (100 tablets)
EX010	3ft (1m) Extension Cable w/Probe Guard/Weight
EX050	16ft (5m) Extension Cable w/Probe Guard/Weight
CA895	Small vinyl carrying case with belt loop
CA904	Large hard case for meter and accessories

*ExStik® II electrode modules are not interchangeable with ExStik® pH/ORP/Chlorine meters

CE All models are CE approved



PH100 ExStik® pH Meters

Flat Surface electrode provides on-the-spot pH measurements

- RENEW feature tells you when it's time to replace your pH electrode
- CAL feature tells you when it's time to recalibrate your meter
- Flat Surface pH electrode rugged design measures pH on solid and semi-solid surfaces
- Analog bargraph originates at neutral point (pH 7.00) to view trends in acidity or alkalinity
- 1, 2 or 3 point calibration (order pH buffers separately)
- ATC plus measures Temperature
- Memory stores 15 labeled data
- Waterproof to IP57 protects meter from wet environment
- Includes flat surface pH electrode, sensor cap, sample cup with cap, four 3V CR2032 button batteries and 48" (1.2m) neckstrap



RE300 ExStik® ORP Meter

High resolution of 1mV

- Measures ORP/Redox from -999 to 999mV
- Automatic electronic self calibration
- Simulated analog bargraph displays change in ORP reading
- Memory stores 15 labeled data
- Waterproof to IP57 protects meter from wet environment
- Complete with flat surface ORP electrode, protective sensor cap, sample cup with cap, four 3V CR2032 button batteries and 48" (1.2m) neckstrap

SPECIFICATIONS	PH100	RE300
pH	0.00 to 14.00pH	—
ORP (mV)	—	-999 to 999mV
Conductivity	—	—
TDS/Salinity/Fluoride	—	—
DO saturation/concentration	—	—
Temperature	23° to 194°F (-5 to 90°C)	—
Max. Resolution	0.01pH, 0.1°	1mV
Basic Accuracy	±0.01pH, ±1.8°F/1°C	±4mV
Dimensions	1.4x6.8x1.6" (35.6x172.7x40.6mm)	1.4x6.8x1.6" (35.6x172.7x40.6mm)
Weight	3.8oz (110g)	3.8oz (110g)
Warranty	1yr (meter)/6mo conditional warranty (electrode)	1yr (meter)/6mo conditional warranty (electrode)



EC400/EC500 ExStik® II Conductivity Meters

Autoranging, high accuracy combination electrode measures multi parameters

- Analog bargraph indicates trends
- Adjustable Conductivity to TDS ratio from 0.4 to 1.0
- 0.5 fixed Salinity ratio
- Data Hold, Auto power off, Low battery indicator
- Memory stores 25 labeled data
- Waterproof to IP57 protects meter from wet environment
- Complete with electrode, sensor cap, sample cup with cap, four 3V CR2032 batteries, and 48" (1.2m) neckstrap. Order Conductivity standards separately on p. 132.
- **Model EC400** includes Conductivity/TDS cell
- **Model EC500** includes combination pH/Conductivity/TDS cell; RENEW feature tells user to replace electrode



DO600 ExStik® II Dissolved Oxygen Meter

Easy to replace screw-on membrane cap with optional extension cables

- Oxygen level displayed as % Saturation or Concentration (mg/L [ppm])
- Adjustable Altitude Compensation (0 to 20,000ft in 1,000ft increments)
- Adjustable Salinity Compensation from 0 to 50ppt
- Analog bargraph display
- Self calibration on power up
- Memory stores 25 labeled data
- Waterproof to IP57 protects meter from wet environment
- **Model DO600** meter includes DO electrode, sensor cap, spare membrane cap, electrolyte, four 3V CR2032 batteries, and 48" (1.2m) neckstrap
- **Model DO600-K** Kit includes DO600 meter, DO603 membrane kit, 16ft (5m) extension cable, weighted probe guard, and case



FL700 ExStik® II Fluoride Meter

Direct reading of Fluoride down to 0.1ppm with ATC

- First Fluoride meter with built-in Automatic Temperature Compensation
- Fastest response Fluoride meter (<1min)
- Small sample/TISAB volume required for testing (10mL)
- In compliance with EPA Method 340.2. (Potentiometric Ion Selective Electrode)
- Automatic electronic 1 or 2 point calibration with offset adjustment
- Memory stores 25 labeled data
- Waterproof to IP57 protects meter from wet environment
- Includes electrode, TISAB reagent tablets, sensor cap, four 3V button batteries, and 48" (1.2m) neckstrap
- Contact Extech or your local lab supply for Fluoride calibration standards

■ EC400 | ▲ EC500

■ No | ▲ 0.00 to 14.00pH
—
0 to 199.9µS, 200 to 1999µS, 2.00 to 19.99mS
TDS/Salinity: 0 to 99.9ppm (mg/L), 100 to 999ppm (mg/L), 1.00 to 9.99ppt (g/L)
—
■ 32° to 149°F (0 to 65°C) | ▲ 23° to 194°F (-5 to 90°C)
0.1µS, 0.1ppm (mg/L), 0.01pH, 0.1°F/°C
±2%FS, ±0.01pH, ±1.8°F/1°C
1.4x6.8x1.6" (35.6x172.7x40.6mm)
3.8oz (110g)
1yr (meter)/6mo conditional warranty (electrode)

■ DO600 | ▲ DO600-K

—
—
—
—
0 to 200.0% / 0 to 20.00ppm (mg/L)
32° to 122°F (0 to 50°C)
0.1%, 0.01ppm (mg/L), 0.1°F/°C
±2.0% FS, 0.4ppm (mg/L), ±1.8°F/1°C
1.4x6.8x1.6" (35.6x172.7x40.6mm)
3.8oz (110g) Meter only
1yr (meter)/6mo conditional warranty (electrode)

FL700

—
—
—
Fluoride: 0.1 to 10ppm
—
32° to 140°F (0 to 60°C)
0.1ppm, 0.1°
±3.0% of reading
1.4x6.8x1.6" (35.6x172.7x40.6mm)
3.8oz (110g)
1yr (meter)/6mo conditional warranty (electrode)

SPECIFICATIONS

pH
ORP
Conductivity
TDS/Salinity/Fluoride
DO saturation/concentration
Temperature
Max. Resolution
Basic Accuracy
Dimensions
Weight
Warranty

CL200 ExStik® Waterproof Chlorine Meter



Direct reading of Total chlorine down to 0.01ppm and is unaffected by color or Turbidity of the sample

- Direct reading of Total Chlorine provides fast and easy measurements
- Wide dynamic range to 10ppm and low detection limit down to 0.01ppm
- Unaffected by sample color or turbidity
- Automatic electronic calibration
- Memory stores 15 labeled readings
- Unique flat surface chlorine electrode eliminates any concerns for clogged junctions or glass breakage
- Waterproof to IP57
- Large LCD simultaneously displays ppm of Total Chlorine, Temperature and analog bargraph indicator
- 1 year warranty (meter)/ 6 months conditional warranty (electrode)
- Complete with meter and flat surface Chlorine electrode, ExTab™ reagent tablets (50 tests), protective sensor cap, sample cup with cap, four 3V button batteries, and 48" (1.2m) neckstrap

SPECIFICATIONS

ppm	0.01 to 10.00ppm
Temperature	23° to 194°F (-5 to 90°C)
Resolution	0.01ppm; 0.1°F/°C;
Basic accuracy	±10% of reading ±0.01ppm; ±1.8°F/±1°C
Dimensions/ Weight	1.4x6.8x1.6" (35.6x172.7x40.6mm)/ 3.85oz (110g)

ORDERING

CL200	ExStik® Chlorine Meter
CA895	Small vinyl carrying case with belt loop
CL205	Spare Chlorine electrode
CL207	Chlorine Standard (1ppm) - 3 ampules (20mL ea.)

EX006/EX007 Accessories



Weighted Base & Solution Cups

- Recommended for ExStik® Chlorine
- Complete with weighted base and 5 solution cups with caps to hold meter and solution when taking a measurement to obtain a stable reading

CL203/CL204 ExTab™ Chlorine Reagent tablets

- No messy powder reagents
- 1 tablet per test
- Foil packaging provides very stable environment with long shelf life
- No dosing equipment required
- No messy powder reagents
- Available in 10pk (100 tests) or Value pack 100pk (1000 tests)

ORDERING

CL203	ExTab™ Reagent tablets (10pk - 100 tests)
CL204	ExTab™ Reagent tablets (100pk - 1000 tests)

CL207 Chlorine Standard

- 1ppm standard for chlorine meter calibration
- Complete with 3 ampules (20mL each) 1ppm calibration standards

ORDERING

CL207	Chlorine Standard (1ppm) - 3 ampules (20mL ea.)
-------	---

EX900 ExStik® 4-in-1 Kit



Complete kit allows you to measure Chlorine, pH, ORP, and Temperature with all the necessary accessories

Kit Includes:

- CL200 Chlorine ExStik® meter, flat surface pH electrode, flat surface ORP electrode, ExTab™ reagent tablets (50 tests), pH 4, 7 & 10 buffer solutions (20mL) and rinse solution, weighted base with 6 sample plastic cups with caps, four 3V CR2032 button batteries, 48" (1.2m) neckstrap, and case
- Also available EX800 Kit includes all of the above except for ORP electrode.
- See p. 132 and 134 for specifications on the ExStik Meters

ORDERING

EX900	ExStik® 4-in-1 Kit Chlorine, pH, ORP, Temperature
EX800	ExStik® 3-in-1 Kit Chlorine, pH, Temperature

EC410 ExStik® II* Conductivity Kit



Highly accurate multi-ranging sensor that measures Conductivity, TDS, Salinity, and Temperature

- EC400 ExStik® II Conductivity/TDS/Salinity/Temperature meter with sensor, protective cap, 84 μ S, 1413 μ S and 12880 μ S standards (30mL bottle each), weighted base, 3 sample plastic cups with caps, four 3V CR2032 button batteries, 48" (1.2m) neckstrap, and carrying case
- See p. 133 for more specifications on the EC400 meter

ORDERING

EC410	ExStik® II Conductivity Kit
-------	-----------------------------

EC510 ExStik® II pH/Conductivity Kit



Measures pH, Conductivity, TDS, Salinity, and Temperature using a combination electrode

- EC500 ExStik II pH/Conductivity/TDS/Salinity/Temperature meter with combination electrode module, 84 μ S, 1413 μ S, 12880 μ S calibration standards, pH buffer pouches (1 each of 4, 7, 10pH plus rinse solution), weighted base, three sample cups with caps, four 3V CR2032 batteries, neckstrap, and case
- See p. 133 for more details on the EC500 meter

ORDERING

EC510	ExStik® II pH/Conductivity Kit
-------	--------------------------------

DO610 ExStik® II* DO/pH/EC Kit



Measures Dissolved Oxygen, pH, Conductivity, TDS, Salinity, and Temperature

- EC500 pH/Conductivity ExStik® II meter with combination high accuracy multi-ranging Conductivity sensor for Conductivity, TDS, Salinity, pH and Temperature measurements
- DO600 Dissolved Oxygen ExStik® II meter with electrode, replacement membrane cap, electrolyte, and polishing paper

Accessories included:

- Sample pH Buffers — Single use pouches for pH4, pH7, pH10, and rinse solution
- Weighted base with 2 cups and caps, four 3V CR2032 batteries and neckstrap with each meter, and case
- See p. 133 for more details on the EC500 and DO600 meters

ORDERING

DO610	ExStik® II DO/pH/Conductivity Kit
-------	-----------------------------------

For Rugged, Accurate Results

Extech field-tested lab instruments are fast-responding tools designed to deliver accurate and repeatable readings with waterproof and datalogging models available.



ACCESSORIES

PH105	Spare pH ExStik® Electrode Module
PH115	Spare Refillable pH ExStik® Electrode Module
PH113	Reference Refill Solution Kit for PH110
PH305	Spare pH Electrode for PH300, EC600, DO700
6015WC	Waterproof pH Electrode with cable for Palm pH
6012WS	Waterproof Stick Type pH Electrode for Palm pH
PH4-P	pH 4 Buffer Solution (2 bottles - 1 pint each)
PH7-P	pH 7 Buffer Solution (2 bottles - 1 pint each)
PH10-P	pH 10 Buffer Solution (2 bottles - 1 pint each)
PH103	Tripak Buffer pouches (see photo above)
850185	RTD Stainless Steel Temp. Probe for the Oyster
850188	Temperature probe, stainless steel for 407228
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)
CA895	Vinyl Pouch Carrying Case for PH100



PH110

PH100/PH110 Waterproof ExStik® pH Meters

Choose flat surface gel-filled or refillable pH electrode

- “RENEW” feature alerts user when electrode needs replacement
- “CAL” indicator alerts user to recalibrate
- Analog bargraph originates at neutral point (pH 7.00) to conveniently view trends in acidity or alkalinity
- 1, 2 or 3 point buffer calibration; ATC
- Records 15 labeled readings
- Waterproof housing (meets IP57)
- Complete with protective sensor cap, sample cup with cap, four 3V button batteries, and 48" (1.2m) neckstrap; requires pH buffers sold separately
- **Model PH100** meter includes gel filled pH flat surface electrode
- **Model PH110** meter includes refillable flat surface pH electrode; PH113 KCl reference kit sold separately



PH220-C

PH220 Waterproof Palm pH/ORP Meter

Large LCD display in rugged housing with choice of stick or cabled pH Electrode

- Displays pH or mV and Temperature simultaneously
- Automatic Buffer recognition
- Automatic Temperature Compensation via Pt-100 sensor built into electrode
- Low Battery indicator and Auto Power off
- Waterproof housing (meets IP57)
- Rugged design for handheld or wall mount (magnetic back)
- Complete with waterproof meter, pH electrode, protective holster, pH 4 & 7 buffers (1 pouch ea.), and 9V battery
- **Model PH220-C** Kit includes ATC pH polycarbonate electrode (12mm diameter) with 39" (1m) cable
- **Model PH220-S** Kit includes ATC pH stick type polycarbonate electrode (12mm diameter) for direct connection to meter

SPECIFICATIONS

	■ PH100 ▲ PH110	■ PH220-C ▲ PH220-S
Type	■ Gel Filled ▲ Refillable	■ Cabled pH Electrode ▲ Stick pH Electrode
pH	0.00 to 14.00pH	0.00 to 14.00pH
mV	—	-999 to 999mV
Temperature	23° to 194°F (-5 to 90°C)	32° to 212°F (0 to 99.9°C)
Max Resolution	0.01pH, 0.1°	0.01pH, 1mV, 0.1°
Basic Accuracy	±0.01pH, ±1.8°F/1°C	±0.01pH, ±2mV, ±0.8°F/0.5°C
Memory	15 readings	—
PC Interface	—	—
Dimensions/ Weight	1.4x6.8x1.6" (35.6x172.7x40.6mm)/3.8oz (110g)	4.4x3.1x1.5" (111x79x39mm)/ 9.2 oz (260g)
Warranty	1yr (meter)/6mo conditional warranty (electrode)	1yr (meter)/6mo conditional warranty (electrode)

NOTE: It is recommended that you calibrate your conductivity meter to conductivity standards before use.

CE All models are CE approved.

CALIBRATION TRACEABLE TO **NIST**



PH300 Waterproof pH/Temperature Kit

Measures pH, mV, and Temperature

- Automatic calibration (4, 7, and 10pH)
- Choice of 3 point calibration for better accuracy
- Automatic Temperature Compensation
- Memory stores up to 200 labeled readings
- Waterproof housing (meets IP57)
- Large blue backlit dual LCD displays both pH and Temperature readings
- Auto power off with disable function
- Complete with pH/mV/Temperature electrode, pH calibration solutions (4, 7, and 10pH), 2 AA batteries, and hard carrying case



Oyster™ Series pH/ORP/Temp Kits

Exclusive Oyster™ Design can be used in the lab or in the field

- Large LCD built into adjustable “flip-up” cover displays pH or mV and Temperature simultaneously
- Convenient neckstrap holds meter while you take measurements
- Records 25 labeled readings
- Min/Max mode; Auto or Manual Temperature compensation (ATC/MTC)
- Self diagnostics display codes
- Auto Power off
- 5 point buffer recognition (1.68, 4.00, 7.00, 10.00, 12.45) with adjustable buffer values
- Optional Universal AC Adaptor UA100-240
- **Model OYSTER-15** Kit includes Oyster-10 meter, neckstrap, 9V battery, 60120B mini pH electrode, sample buffers (4 and 7pH), and carrying case
- **Model OYSTER-16** Kit includes Oyster-15 plus RTD Temperature probe



SDL100 pH/ORP/Temperature Datalogger

Datalogger date/time stamps and stores 20M readings on a 2G SD card in Excel® format for easy transfer to a PC

- ATC or manual Temperature compensation
- 3 point calibration ensures the best linearity and accuracy
- Selectable data sampling rate: 1 second to 8hrs:59min:59sec
- Manually store/recall up to 99 readings
- Large backlit dual LCD
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- Complete with 6 x AA batteries, SD card, sample buffers, mini pH electrode (60120B), temperature probe (850188), and hard carrying case; Optional AC Adaptor 153117 or UA100-240

PH300

Cabled pH Electrode
-2.0 to 19pH
-1999mV to 1999mV
32 to 212°F (0 to 100°C)
0.01pH, 1mV, 0.1°
±0.02pH, ±0.15mV, ±1°F/0.5°C
200 readings
—
4.7x2.6x1.2" (120x65x31mm)/6.3oz (180g)
1yr (meter)/6mo conditional warranty (electrode)

■ OYSTER-15 | ▲ OYSTER-16

■ Meter+pH electrode+case ▲ Meter+pH electrode+ case+Temp probe
0.00 to 14.00pH
-999 to 999mV
32° to 212°F (0 to 99.9°C)
0.01pH, 1mV, 0.1°
±0.02pH, ±2mV, ±0.8°F/0.5°C
25 readings
—
3.7x4.2x2" (94x107x51mm)/ 12oz (340g)
1yr (meter)/6mo conditional warranty (electrode)

SDL100 N

Cabled pH Electrode
0 to 14pH
-1999mV to 1999mV
32 to 149°F (0 to 65°C)
0.01pH, 1mV, 0.1°
±0.02pH, ±0.5% mV, ±1.8°F/1°C)
20M readings on 2G SD card
Optional 407001 Software (see p. 106)
7.2x2.9x1.9" (182X73X48mm)/16oz (455g)
3yr (meter)/6mo conditional warranty (electrode)

SPECIFICATIONS

Type
pH
mV
Temperature
Max Resolution
Basic Accuracy
Memory
PC Interface
Dimensions/ Weight
Warranty

PH150-C Concrete pH Kit



Measure pH level of concrete using a pH meter with a flat surface pH electrode plus a metal weight probe guard for stability and protection

Flat surface electrode provides fast and easy on-the-spot pH measurements on concrete

- 3ft (1m) extension cable with probe guard/weight attaches to the Concrete pH Meter for taking measurements on flat concrete surfaces
- Rust resistant metal weight probe guard helps keep electrode in contact with the wet concrete surface and protects the electrode
- RENEW indicator tells you when it's time to replace your electrode
- CAL alert tells you it's time to recalibrate
- Memory records and recalls 25 readings
- 1, 2 or 3 point calibration
- Data Hold, Auto power off, and Low battery indication
- Waterproof/dustproof design (IP57)
- Complete with flat surface concrete pH electrode, protective sensor cap, sample cup with cap, plastic stand, 1m extension cable with weighted probe guard, plastic bottle, four 3V CR2032 button batteries, 48" (1.2m) neckstrap, and carrying case

SPECIFICATIONS

pH	0.00 to 14.00pH
Temperature	23 to 194°F (-5 to 90°C)
Resolution	0.01pH, 0.1°
Accuracy	±0.01pH, ±1.8°F/±1°C
Dimensions (Meter)	1.4 x 6.8 x 1.6" (35.6 x 172.7 x 40.6mm)
Weight (Meter)	3.8oz (110g)

ORDERING

PH150-C	Concrete pH Kit
PH155	Spare ExStik® Concrete pH Electrode Module

PH50/PH60 pH Pens



Easy-to-use, low cost waterproof pH pens

- **Model PH50** — Measures pH
- **Model PH60** — Measures pH and Temperature Automatic Temperature Compensation Waterproof housing
- Easy to calibrate single CAL key with automatic pH buffer recognition (4, 7, and 10pH calibration buffers sold separately)
- Data hold with Low battery indicator
- Auto power off with disable feature
- 1 year warranty
- Complete with built in electrode, sensor cap, inner pH electrode protection cap, and four LR44 button batteries

SPECIFICATIONS

pH	2.0 to 12.0pH	0.0 to 14.0pH
Temperature	—	32 to 122°F (0 to 50°C)
Resolution	0.1pH, 0.1°	0.1pH, 0.1°
Accuracy	±0.3pH	±0.2pH; ±1°F/±0.5°C
Dimensions	6x1.5x0.9" (152x37x24mm)	
Weight	2.3oz (65g)	

ORDERING

PH50	Waterproof pH Pen
PH60	Waterproof pH Meter with Temperature
PH103	Tripak buffers (6ea - 4,7,10pH+2 Rinse solutions)

pH Electrodes



Choice of Standard or Specialized electrodes with Ag/AgCl gel filled (fast response: 95% in 5sec)

Models 60120B and 601500 — General purpose pH/Ref electrodes

- Rugged, polycarbonate construction features glass pH sensing bulb surrounded by protective teeth. pH range (0 to 14pH), operating temperature (0 to 80°C). Choice of Mini or Standard size.

Model 601100 — Flat surface electrode (Easy to clean)

- PVC bodied electrode, ideal for pH of solid products with minimal moisture like cheese, soils or electrophoretic/agar gels. pH range (0 to 14pH), operating temperature (5 to 80°C).

ORDERING

60120B	Mini pH Electrode (10 x 120mm)
601500	Standard pH Electrode (12 x 160mm)
601100	Flat Surface pH Electrode (15 x 106mm)

ExStik® Replacement pH, ORP, and Chlorine Electrode Modules



Flat surface pH, Chlorine, and ORP electrode modules

Reference Refilling Solution Kit for PH115 Refillable pH electrode module

Interchangeable pH, ORP, and Chlorine sensor modules for ExStik® series meters featured on (p. 132, 134, 136)

- ATC via built-in Pt-100Ω sensor (PH105, PH115 & CL205)
- Refillable pH electrode (PH115) provides an economical way to refill your electrode, eliminates the problem of limited electrode shelf life, contamination, and usage life in aggressive applications
- Note: The PH105, CL205 and RE305 replacement modules are not interchangeable with ExStik® II meters shown on p. 133
- 6 month conditional warranty

ORDERING

PH105	pH ExStik® Electrode Module
PH115	Refillable pH ExStik® Electrode Module
PH113	Reference Refilling Solution Kit for PH115
CL205	Chlorine ExStik® Electrode Module
RE305	ORP ExStik® Electrode Module

pH Buffers



Convenient calibration solutions for your pH meter

- Easy to use, already made fresh pH buffers for calibration
- Helpful table shows what the pH value should be vs. the temperature of the buffer solution measured
- Rinsing solution used for cleaning off the pH electrode before and after taking the next measurement from a different solution to prevent contamination
- Convenient pouch eliminates the need for a cup to store buffer or rinsing solution
- PH103 contains 6 pouches of each buffer (pH 4.00, 7.00, and 10.00), plus 2 Rinsing solutions
- Pint size pH buffer solutions available (PH4-P, PH7-P, and PH10-P)

ORDERING

PH4-P	pH 4 Buffer Calibration Solution (2 bottles - 1 pint each)
PH7-P	pH 7 Buffer Calibration Solution (2 bottles - 1 pint each)
PH10-P	pH 10 Buffer Calibration Solution (2 bottles - 1 pint each)
PH103	Tripak Buffer pouches (6ea: 4, 7, 10pH, 2 Rinse solutions)

Ensuring Water Quality

Extech offers must-have water quality testing tools. Find Extech on the job in wastewater treatment facilities, water treatment, industrial systems (boiler water systems, cooling towers, cooling systems, closed loops), alternative farming (hydro-/aeroponics), fish farming, lab testing, pool maintenance, R&D, and more.



ACCESSORIES

EC-84-P	84µS Conductivity Standard (2 bottles - 1 pint each)
EC-1413-P	1413µS Conductivity Standard (2 bottles - 1 pint each)
EC-12880-P	12880µS Conductivity Standard (2 bottles - 1 pint each)
EC405*	Spare ExStik® II Conductivity Cell Module for EC400
EC505*	Spare ExStik® II pH/Conductivity Cell Module for EC500
EC605	Spare Conductivity Cell for EC600 and DO700
804010A	Polymer Conductivity Cell for 341350A-P
PH305	Spare pH Electrode for PH300, EC600, DO700
60120B	Spare Mini pH Electrode for 341350A-P
CA895	Small vinyl case with belt loop for EC400, EC500
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)
850190	Thermistor Probe (32 to 194°F/0 to 90°C) for 341350A-P

*ExStik® II electrode modules are not interchangeable with ExStik® pH/ORP/Chlorine meters

☑ All models are CE approved



N Indicates products that are available with optional calibration traceable to **NIST**. See page 144 for a complete listing.



EC410 kit

EC400/EC410 ExStik® II Conductivity/ TDS/ Salinity/ Temperature Meter

High accuracy multi-range sensor measures all four parameters

- 8 units of measure include: µS, mS, ppm, ppt, mg/L, g/L, °C, °F
- Simultaneous display of Conductivity or TDS plus Temperature and bargraph
- Memory stores up to 25 labeled readings
- Adjustable Conductivity to TDS ratio factor from 0.4 to 1.0
- Self calibration on power up
- Waterproof to IP57
- EC400 meter includes Conductivity cell*, protective sensor cap, sample cup with cap, four 3V CR2032 button batteries, and 48" (1.2m) neckstrap; Calibration standards sold separately
- EC410 kit (p.135) includes EC400, 84µS, 1413µS, 12880µS calibration standards, weighted base, 3 sample cups with caps, and case

SPECIFICATIONS

	■ EC400 ▲ EC410
Conductivity	0 to 199.9µS, 200 to 1999µS, 2.00 to 19.99mS
TDS/Salinity	0 to 99.9ppm (mg/L), 100 to 999ppm (mg/L), 1.00 to 9.99ppt (g/L)
pH	—
mV	—
Temperature	32° to 149°F (0 to 65°C)
Max. Resolution	0.1µS, 0.1ppm (mg/L), 0.1°F/°C
Basic Accuracy	±2%FS, ±1.8°F/1°C
Dimensions	■ Meter: 1.4x6.8x1.6" (36x173x41mm)/3.8oz (110g) ▲ Kit: 9.5x6.8x2.8" (241x173x71mm)/1.56lbs (708g)
Warranty	1yr (meter)/6mo conditional warranty (electrode)

NOTE: It is recommended that you calibrate your conductivity meter to conductivity standards before use.



EC510 kit

EC500/EC510 ExStik® II pH/Conductivity/Temperature Meter

Combination rugged flat surface pH electrode with Conductivity cell

- 9 units of measure: pH, μS , mS , ppm, ppt, mg/L, g/L, $^{\circ}\text{C}$, $^{\circ}\text{F}$
- Analog bargraph indicates trends
- Memory stores up to 25 labeled readings
- Adjustable Conductivity to TDS ratio from 0.4 to 1.0; 0.5 fixed Salinity ratio
- RENEW feature alerts user when electrode needs replacement
- Waterproof to IP57
- EC500 meter includes electrode, protective sensor cap, sample cup with cap, four 3V CR2032 batteries, and 48" (1.2m) neckstrap; Calibration standards sold separately
- EC510 Kit includes EC500, 84 μS , 1413 μS , 12880 μS calibration standards, pH buffer pouches (1 each of 4, 7, 10pH plus rinse solution), weighted base, 3 sample cups with caps, and case



Meter and accessories packaged in hard case

EC600 Waterproof Conductivity Kit

Measures Conductivity, TDS, Salinity, Resistivity, pH, mV and Temperature

- Waterproof housing (meets IP57)
- Choice of 3 point pH calibration (4, 7, and 10pH) for better accuracy
- One point Conductivity calibration – automatically recognizes 8 calibration solutions
- Automatic Temperature Compensation (non-linear compensation for purified water $<10\mu\text{S}/\text{cm}$ to improve measuring accuracy)
- Memory stores up to 300 labeled readings
- Large blue backlit dual LCD display
- Auto power off with disable function
- Complete with pH/mV/Temperature electrode, polymer Conductivity cell, pH calibration solutions (4, 7, and 10pH), Conductivity calibration solution (1413 μS), 2 AA batteries, and hard carrying case



Meter and accessories packaged in hard case

341350A-P pH/Conductivity/TDS/ORP/Salinity Meter

Exclusive Oyster™ Design can be used in the lab or in the field

- Large dual LCD built into adjustable "flip-up" cover
- Microprocessor based with splash-proof housing and front panel tactile touch pad to slope and calibrate
- Rugged design for handheld or benchtop use
- Convenient neckstrap holds meter while you take measurements
- Memory function stores and recalls 25 labeled readings
- Automatic Temperature Compensation for Conductivity/TDS via thermistor built into conductivity cell
- Manual Temperature Compensation for pH (0 to 100 $^{\circ}\text{C}$)
- Complete with mini pH electrode, thermistor probe (850190), sample buffers, polymer conductivity cell, 9V battery, neckstrap and case; Optional Universal AC adaptor UA100-240

■ EC500 | ▲ EC510

0 to 199.9 μS , 200 to 1999 μS , 2.00 to 19.99mS
0 to 99.9ppm (mg/L), 100 to 999ppm (mg/L), 1.00 to 9.99ppt (g/L); 0 to 100ppt (g/L)
0.00 to 14.00pH
–
32 $^{\circ}$ to 149 $^{\circ}\text{F}$ (0 to 65 $^{\circ}\text{C}$)
0.1 μS , 0.1ppm (mg/L), 0.01pH, 0.1 $^{\circ}\text{F}/^{\circ}\text{C}$
$\pm 2\%$ FS, $\pm 1.8^{\circ}\text{F}/1^{\circ}\text{C}$
■ Meter: 1.4x6.8x1.6" (36x173x41mm)/ 3.8oz (110g)
▲ Kit: 9.5x6.8x2.8" (241x173x71mm)/1.56lbs (708g)
1yr (meter)/6mo conditional warranty (electrode)

EC600

0.00 to 199.9mS
0 to 100g/L
-2 to 19pH
-1999mV to + 1999
pH/mV: 32 to 212 $^{\circ}\text{F}$ (0 to 100 $^{\circ}\text{C}$); Other: 32 to 122 $^{\circ}\text{F}$ (0 to 50 $^{\circ}\text{C}$)
0.01pH, 1mV, 0.01 μS , 0.01mg/L, 0.01ppt, 0.1 $^{\circ}\text{F}/^{\circ}\text{C}$
$\pm 0.02\text{pH}$, $\pm 0.15\text{mV}$, $\pm 1.5\%$ FS, $\pm 1^{\circ}\text{F}/0.5^{\circ}\text{C}$
4.7x2.6x1.2" (120x65x31mm)/6.3oz (180g)
1yr (meter)/6mo conditional warranty (electrode)

341350A-P N

10 to 19,990 $\mu\text{S}/\text{cm}$
TDS range: 10 to 19,990ppm (mg/L)
0.01 to 14.00pH
–
Thermistor probe: 32 to 194 $^{\circ}\text{F}$ (0 to 90.0 $^{\circ}\text{C}$)
0.1mS; 0.01pH
$\pm 2\%$, $\pm 0.02\text{pH}$
3.7x4.2x2" (96x108x45mm)/ 12oz (340g)
1yr (meter)/6mo conditional warranty (electrode)

SDL150 Dissolved Oxygen Meter/Datalogger



Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC

- Dual display of Oxygen Concentration and Temperature
- Measures dissolved oxygen from 0 to 20.0mg/L and 0 to 100.0% oxygen plus temperature from 32 to 122°F (0 to 50°C)
- Automatic Temperature Compensation from 0 to 50°C via temperature sensor built into polarographic type oxygen probe
- Selectable data sampling rate: 1 second to 8hrs:59min:59sec
- Manually store/recall up to 99 readings
- Large backlit dual LCD
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- 3 year warranty (meter)/ 6 months conditional warranty (electrode)
- Complete with 6 x AA batteries, SD card, probe, spare probe head with diaphragm, electrolyte, and hard carrying case; Optional Universal AC adaptors

SPECIFICATIONS	DISSOLVED OXYGEN	OXYGEN	TEMPERATURE
Range	0 to 20.0 mg/L	0 to 100.0%	32 to 122°F (0 to 50°C)
Accuracy	±0.4 mg/L	±0.7%	±0.8°C/1.5°F
Probe Compensation & Adjustment	Salt: 0 to 50%	Altitude: 0 to 8910m	Temp: 0 to 50°C
Datalogging	99 data (manual)/20M data (2G SD card)		
PC Interface	Optional 407001 Software (see p. 106)		
Dimensions/Weight	Meter: 7.2x2.9x1.9" (182x73x48mm)/ 25.6oz(725g) Probe: 0.8Dx4.9"L		

ORDERING

SDL150	Dissolved Oxygen Meter/Datalogger
407510-P	Dissolved Oxygen probe with 13ft (4m) cable
780417A	Replacement Membranes (10/pack)
780418	DO Internal Fill Solution (2pks — 50mL each)
153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

407510 Heavy Duty Dissolved Oxygen Meter



Dual display of Oxygen concentration in solutions and Temperature — plus RS-232 PC interface

- Measures dissolved oxygen, oxygen, plus temperature
- Min/Max/Avg, Data Hold and Auto power off
- Automatic Temperature Compensation
- Large 1.4" (36mm) LCD display
- Built-in PC interface with optional Data Acquisition Software 407001 and Datalogger 380340 (see p. 106)
- 3 year warranty (meter)/ 6 months conditional warranty (electrode)

SPECIFICATIONS	DISSOLVED OXYGEN	OXYGEN	TEMPERATURE
Range	0 to 19.9mg/L	0 to 100.0%	32 to 122°F (0 to 50°C)
Accuracy	±0.4mg/L	±0.7%	±1.5°F/ ±0.8°C
Probe Compensation & Adjustment	Salt: 0 to 39%	Altitude 0 to 3900m	Temp: 0 to 50°C
Dimensions/ Weight	Meter: 7x3x1.3" (178x74x33mm); Probe: 0.8Dx4.9"L		
Weight	17oz (482g)		

ORDERING

407510	Heavy Duty Dissolved Oxygen Kit
407510-P	Dissolved Oxygen probe with 13ft (4m) cable
780417A	Replacement Membranes (10/pack)
780418	DO Internal Fill Solution (2pks — 50mL each)

Complete with 0.8" (20mm) probe on 13ft (4m) cable, membranes, protective holster with stand, 9V battery, and carrying case

DO700 Waterproof Series Dissolved Oxygen Kit



Read to use complete kit includes all the necessary accessories stored in a hard case for easy transportation. Ideal for field use.



8-in-1 Meter – Measures DO concentration/saturation, pH, mV, Conductivity, TDS, Salinity, Resistivity and Temperature

- Automatic salinity compensation and manual barometric pressure compensation for DO measurements
- Waterproof housing (meets IP57) design and large blue backlit dual LCD display
- Choice of 3 point pH calibration for better accuracy; Automatic Temperature Compensation
- One point Conductivity calibration – automatically recognizes 8 calibration solutions
- Memory stores up to 400 labeled readings
- Auto power off with disable function
- 1 year warranty (meter)/ 6 months conditional warranty (electrode)
- Complete with Dissolved Oxygen probe with 3 membrane caps and DO internal fill solution (30mL), pH/mV/Temperature electrode, polymer Conductivity cell, pH calibration solutions (4, 7, and 10pH), Conductivity calibration solution (1413µS), 2 AA batteries, and hard carrying case

SPECIFICATIONS	RANGE	RESOLUTION	BASIC ACCURACY
Dissolved Oxygen (Concentration)	0 to 40.00mg/L	0.01mg/L	±1.5%FS
Dissolved Oxygen (Saturation)	0 to 200.0%	0.1%	±1.5%FS
pH	-2.00 to 19.99pH	0.01pH	±0.02pH
mV	-1999 to + 1999mV	1mV	±0.15mV
Conductivity	0.00 to 199.9mS	0.01µS	±1.5%FS
TDS	0 to 100g/L	0.01mg/L	±1.5%FS
Salinity	0 to 100ppt	0.01ppt	±1.5%FS
Resistivity	0 to 100MΩ cm	0.1Ω	±1.5%FS
Temperature (for pH & mV)	32 to 212°F (0 to 100°C)	0.1°	±1°F/±0.5°C
Temperature (other)	32 to 122°F (0 to 50°C)	0.1°	±1°F/±0.5°C
Dimensions/Weight	4.7x2.6x1.2" (120x65x31mm)/ 6.3oz (180g)		

ORDERING

DO700	Waterproof Series Dissolved Oxygen Kit
DO705	Dissolved Oxygen Electrode
DO703	Replacement Membrane Caps (3 caps)
PH305	Spare pH/mV/Temperature Electrode
EC605	Spare Polymer Conductivity Cell

DO600 ExStik® II Dissolved Oxygen Meter



Bonded membrane cap for easy replacement. DO603 Membrane Kit includes 6 screw on membrane caps, 15mL filling solution and polishing paper.



Choice of optional EX010 3ft (1m) or EX050 16ft (5m) extension cable with probe weight.



Waterproof stick meter with Bonded Membrane Caps

- Simultaneous display of DO and Temperature plus analog bargraph to view trends
- Memory stores up to 25 data readings
- Oxygen level displayed as % Saturation or Concentration (mg/L); ATC
- Adjustable Altitude Compensation (0 to 20,000ft in 1,000ft increments)
- Adjustable Salinity Compensation from 0 to 50ppt
- Data Hold, Auto power off and low battery indicator
- Optional 3ft (1m) or 16ft (5m) Extension Cable for remote measurements
- Complete with DO electrode, protective sensor cap, spare membrane cap, electrolyte, sample cup with cap, four 3V CR2032 batteries, and 48" (1.2m) neckstrap; 1 year warranty (meter)/ 6 months conditional warranty (electrode)

SPECIFICATIONS	RANGE	MAX RESOLUTION	BASIC ACCURACY
DO (saturation mode)	0 to 200.0%	0.1%	±2% FS
DO (concentration mode)	0 to 20.00ppm (mg/L)	0.01ppm (mg/L)	0.4ppm (mg/L)
Temperature	32 to 122°F (0 to 50°C)	0.1°F/°C	±1.8°F (1°C)
Dimensions/Weight	1.4x6.9x1.6" (36x176x41mm)/ 3.8oz (110g)		

ORDERING

DO600	ExStik® II Dissolved Oxygen Meter
DO605	Spare ExStik® II Dissolved Oxygen Electrode module
DO603	Membrane Kit for DO600 and DO605
EX010	Extension Cable 3ft (1m) with Probe Guard/Weight
EX050	Extension Cable 16ft (5m) with Probe Guard/Weight

Forums • Chat • Videos • Live Events

PLANET EXTECH



JOIN TODAY!

www.planetextech.com

What Is Planet Extech?

Planet Extech is a brand new community aimed at connecting users of Extech Test & Measurement equipment. Users can share stories, discuss their work, as well as connect with our Tech Support team in the forums.

Planet Extech is also the place to watch the latest product videos, as well as chat with our team of experts during live webcasts. Community members are able to participate in exclusive promotions and contests, learn about new products, and have a chance to win all sorts of prizes.

So what are you waiting for? Join Planet Extech, and start sharing your experience!

Videos

Planet Extech features videos on many of our product categories including: **moisture meters, multimeters, clamp meters, sound and light meters, and many more!**

User Blog

User Profile Page

Discussion Forums

Photos

Be a part of the buzz — join the community today!

EXTECH[®]
INSTRUMENTS
A FLIR COMPANY



**YOUR SOURCE
FOR THE BEST
TEST & MEASUREMENT
TOOLS**

Category Index

Air Velocity/Anemometers	94-97, 120	Insulation Testers (Megohmmeters)	15, 57-59
Air Quality Meters	100-103	LCR Meter	50-51
Battery Tester	46	Light Meters and Dataloggers	106-109
Barometric Meters	83	Manometers (Pressure Meters)	120-121
Borescopes/Video Inspection Cameras	122-125	Megohmmeters (Insulation Testers)	15, 57-59
Cable Testers, Network and LAN	47	Microscopes	51
Calibrators-Current, Voltage, T/C, Process, pH	126-127	Milliohm/Micro-ohm Meters	55-56
Carbon Dioxide (CO ₂) Meters	101-103	Moisture Meters	84-89
Carbon Monoxide (CO) Meters	100	MultiMeters	8-19, 48-49
Chlorine Meter, Kits, and Accessories	134	MultiMeter Accessories	40-43
Circuit Breaker Finder	45	MultiMeter Adaptors	41
Clamp Meter Kits	20-21	MultiMeter Test Kits	20-21
Clamp-on Meters	22-35, 60-61	ORP Meters	132, 136, 137, 141
Clocks, Hygro-Thermometer	93	Oscilloscopes, Graphical MultiMeters	48-49
Coating Thickness Tester	131	Phase & Motor Rotation Testers	36
Component Tester	50-51	pH/mV/Temp Meters, Accessories	132-133, 136-139, 141
Concrete pH Kit	138	Pitot Tube (Air Flow Meter)	120
Conductivity Meters, Kits	133, 140-141	Power Meters/Dataloggers/ Analyzers	35, 60-64
Continuity Tester/Cable Locator	46	Power Supplies	52-53, 64
Dataloggers, Recorders - Voltage/Current	37	Pressure Meters (Manometers)	120-121
Dataloggers, Recorders - Temperature/Humidity	78-79, 83	Psychrometers, Dew Point/Wet Bulb	80-81
Dew Point/Web Bulb	80-81	Refractometers: Sucrose, Salinity, Battery Coolant	130
Dissolved Oxygen Meters	133, 142-143	Salinity Meters	133, 141
Distance Meter	15	Sound Level Alert/Monitors	114
Dosimeters, Noise	115	Sound Level Meters, Calibrators, Datalogger	110-115
Electrical Testers	38-39, 44-45	Stopwatches	128-129
Electrical Test Kits	20-21, 45	Stroboscope Tachometers	119
EMF/ELF, Gauss Meter	66-67	Tachometers - Contact, Photo, & Strobotach	105, 116-119
Environmental Meters	95	TDS Meters (Total Dissolved Solids)	133, 140-141
Environmental Test Kit	91	Temperature Indicators	65, 92-93
Fluoride Meter	133	Temperature Probes (Thermocouple and RTD)	40-41
Force Gauge Meters	103	Test Leads and Accessories	40-43
Fruit Hardness Tester	131	Thermo-Anemometers	94-97
Gas Detectors	100-103	Thermometers: IR	68-73
Ground Resistance/Earth Resistance Testers	54-55	Thermometers: Thermocouple, RTD	74-77
Harmonics Analyzers	63-64	Tone Generators and Wire Tracers	46-47
Heat Index Stopwatch	128	Vibration Meters	104-105
Heat Stress WBGT Meter	82	Video Inspection Cameras	122-125
Home Inspection & Water Restoration Kits	91	Voltage and Current Dataloggers	37
Humidity Graphical Recorder	79	Voltage and Current Detectors	38-39
Humidity Meters, Hygro-Thermometers	80-83	Water Quality Meters, Kits, Accessories	132-135, 139
Humidity Indicators	92-93	Water Restoration Kit	90-91

All specifications and prices are subject to change without notice. See page 144 for a complete part number index