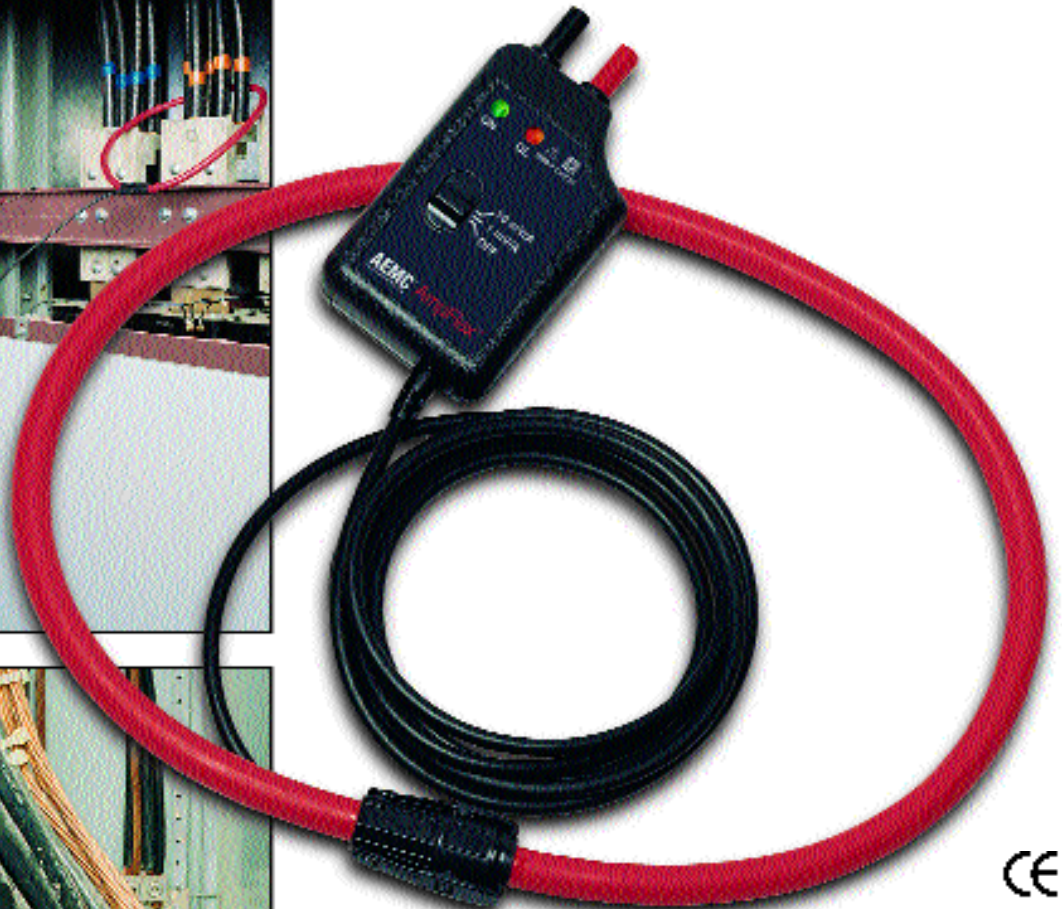
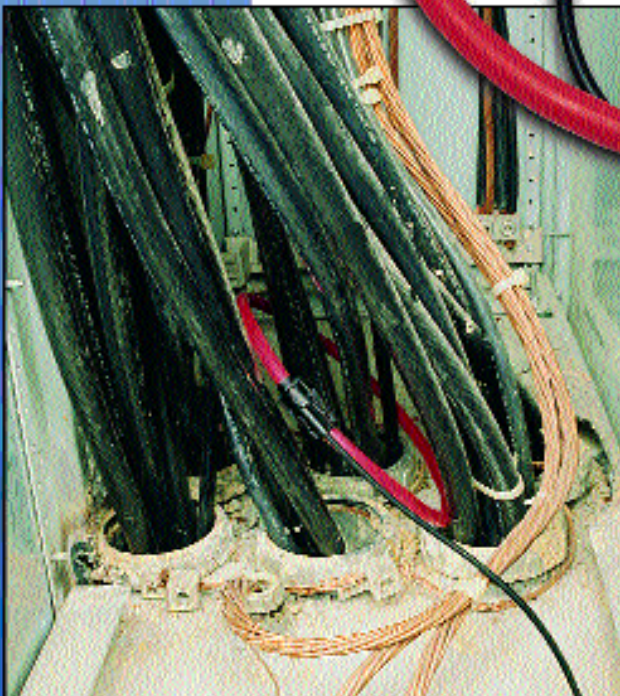


Flexible Current Probes

AmpFlex™



- ◆ Measure from 0.5 Arms to 30,000 Arms
- ◆ Lengths from 24" to 60" standard
- ◆ Accuracy - 1% of reading
- ◆ Shape Memory™ allows pre-forming before installation
- ◆ Very low phase shift error
- ◆ Single and dual range models standard

F E A T U R E S



- Models ranging from 30 Arms to 30,000 Arms
- Accuracy 1% of Reading
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- Overrange LED for measurement circuitry
- 1000 V IEC 1010 Cat III, CE Mark
- Waterproof sensor
- 9 V battery for typical 150 hr continuous operation
- Shape Memory™ for custom pre-shaping of sensor before use (no drooping)
- Very high frequency response
- Low phase shift for power measurements
- Insensitive to DC, measures only AC component on DC + AC signals
- Excellent linearity
- Lightweight

The AmpFlex™ is a flexible AC current probe composed of a flexible sensor and an electronic module. The flexible sensor permits measurements on conductors where standard clamp-on probes cannot be used.

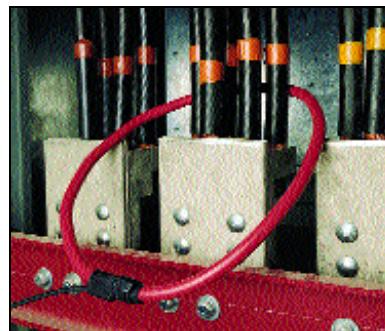
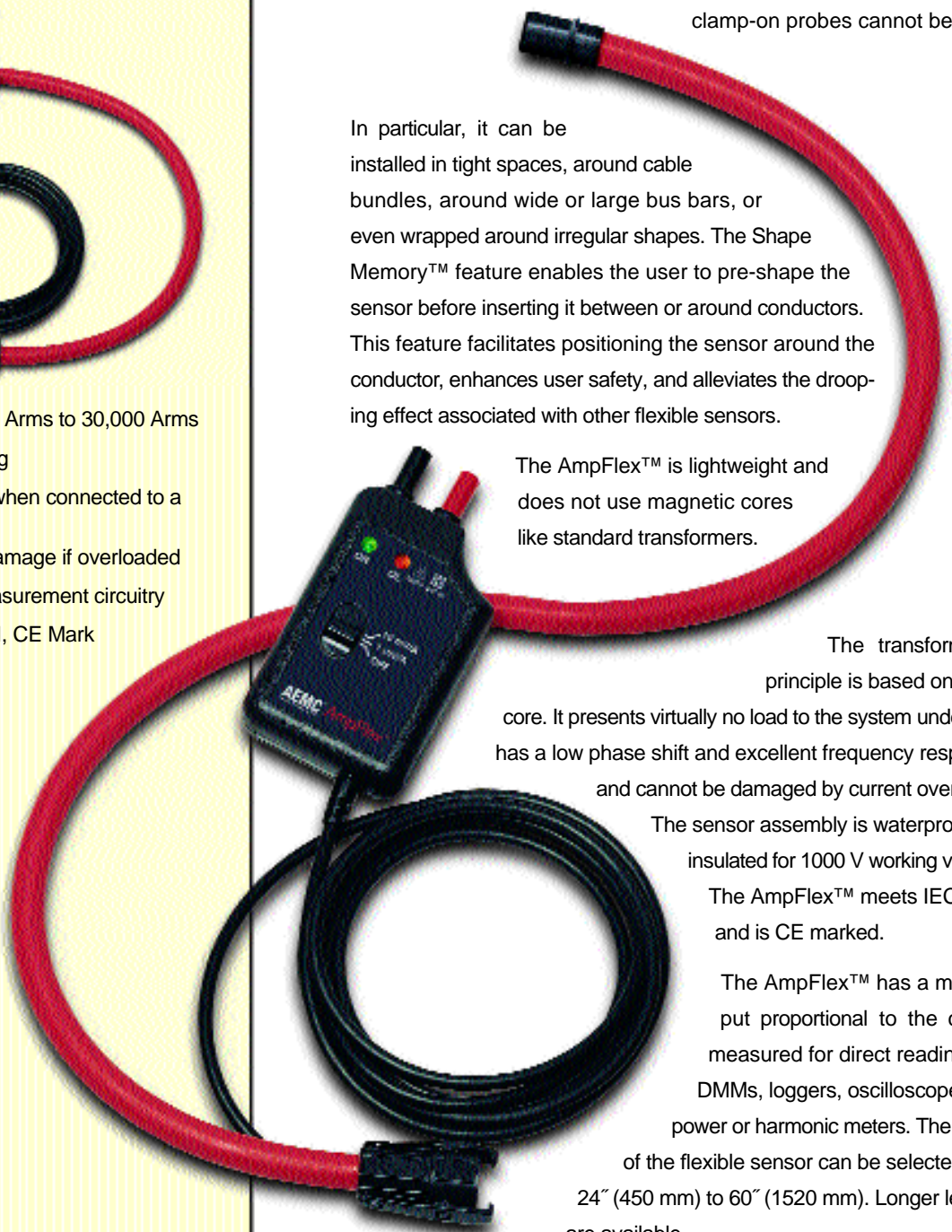
In particular, it can be installed in tight spaces, around cable bundles, around wide or large bus bars, or even wrapped around irregular shapes. The Shape Memory™ feature enables the user to pre-shape the sensor before inserting it between or around conductors. This feature facilitates positioning the sensor around the conductor, enhances user safety, and alleviates the drooping effect associated with other flexible sensors.

The AmpFlex™ is lightweight and does not use magnetic cores like standard transformers.

The transformation principle is based on an air core. It presents virtually no load to the system under test, has a low phase shift and excellent frequency response, and cannot be damaged by current overloads.

The sensor assembly is waterproof and insulated for 1000 V working voltage. The AmpFlex™ meets IEC 1010 and is CE marked.

The AmpFlex™ has a mV output proportional to the current measured for direct readings on DMMs, loggers, oscilloscopes and power or harmonic meters. The length of the flexible sensor can be selected from 24" (450 mm) to 60" (1520 mm). Longer lengths are available.



Many sizes, many ranges – flexibility to easily measure where standard clamp-ons cannot!

ELECTRICAL SPECIFICATIONS

Current Range	30 A	200 A	300 A	300 A	30/300 A	500 A	50/500 A	1000 A	100/1000 A
Measurement Range	5 – 30 A	5 – 200 A	5 – 300 A	5 – 300 A	5 – 300 A	5 – 500 A	5 – 500 A	5 – 1000 A	5 – 1000 A
Output Signal(s)	100 mV/A	1 mV/A	10 mV/A	1 mV/A	100 mV/A 10 mV/A	1 mV/A	10 mV/A 1 mV/A	1 mV/A	10 mV/A 1 mV/A
Crest Factor (mid-range)	3.0	> 10	3.0	> 10	3.0	> 10	> 10	9.0	9.0
Phase Shift @ 50/60 Hz	1.3°	0.7°	0.7°	0.7°	1.3°	0.7°	0.7°	0.7°	0.7°
Residual Noise	500 mA	500 mA	500 mA	500 mA	500 mA	500 mA	500 mA	500 mA	500 mA

Current Range	3000 A	300/3000 A	6000 A	600/6000 A	10,000 A	1000/10,000 A	30,000 A	3000/30,000 A
Measurement Range	5 – 3000 A	5 – 3000 A	5 – 6000 A	5 – 6000 A	5 – 10,000 A	5 – 10,000 A	5 – 30,000 A	5 – 30,000 A
Output Signal(s)	1 mV/A	10 mV/A 1 mV/A	0.1 mV/A	1 mV/A 0.1 mV/A	0.1 mV/A	1 mV/A 0.1 mV/A	0.1 mV/A	1 mV/A 0.1mV/A
Crest Factor (mid-range)	3.0	3.0	> 10	> 10	9.0	9.0	3.0	3.0
Phase Shift @ 50/60 Hz	0.7°	0.7°	0.5°	0.5°	0.5°	0.5°	0.5°	0.5°
Residual Noise	500 mA	500 mA	500 mA	500 mA	500 mA	1 A	1 A	1 A

COMMON SPECIFICATIONS

Accuracy:

1% of Reading

Frequency Range:

10 – 20,000 Hz*

Working Voltage:

1000 V IEC-1010 Cat.III

Safety Standards:

Designed to IEC 1010 and CE mark

CE Markings:

1997

Operating Temperature and % RH:

-20° to 55°C (sensor to 90°C), 0 – 90% RH (@50°C)

Minimum Bend Radius:

0.75" (19mm)

Water and Dustproofing:

Sensor IP65 (Nema 4X), Module IP40

Battery and Battery Life:

9 V alkaline, approx. 150 hours of continuous use

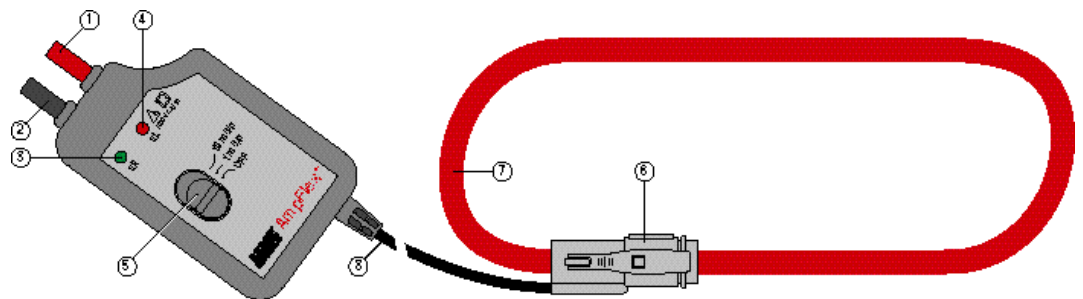
Good Battery Indication: Green LED

Electronic Overload Indication: Red LED

Output:

3/4 spaced banana jacks, optional banana plug to BNC adaptor available, 6.5 ft (2m) lead from sensor to module

*intentionally limited for optimum performance



- 1) Positive: Red banana plug (+)
- 2) Common: Black banana plug (-)
- 3) Power ON indicator (green LED)
- 4) OVERLOAD indicator (red LED)
- 5) Range selection switch
- 6) AmpFlex™ connector/latch
- 7) Flexible sensor (diameter 0.5", 12.5 mm)
- 8) Lead from sensor to module (6.5 ft, 2 m)



Double the turns to double the sensitivity – its flexible...



Direct connections to DMMs, or use BNC accessory to connect to oscilloscopes

ORDERING INFORMATION				
Current Range – Output Signal	Sensor Length/Diameter			
	24"/8" (610 mm/190 mm)	36"/11" (910 mm/ 290 mm)	48"/15" (1220 mm/390 mm)	60"/19" (1520 mm/490 mm)
30 A – 100 mV/A	Cat. #2112.14 Model #30-24-1-100	–	–	–
200 A – 1 mV/A	Cat. #2112.20 Model #200-24-1-1	–	–	–
300 A – 10 mV/A	Cat. #2112.29 Model #300-24-1-10	–	–	–
300 A – 1 mV/A	Cat. #2112.24 Model #300-24-1-1	–	–	–
30/300 A – 100/10 mV/A	Cat. #2112.88 Model #300-24-2-10	–	–	–
500 A – 1 mV/A	Cat. #2112.34 Model #500-24-1-1	–	–	–
50/500 A – 10/1 mV/A	Cat. #2112.93 Model #500-24-2-1	–	–	–
1000 A – 1 mV/A	Cat. #2112.39 Model #1000-24-1-1	Cat. #2112.41 Model #1000-36-1-1	Cat. #2112.42 Model #1000-48-1-1	–
100/1000 A – 10/1 mV/A	Cat. #2112.98 Model #1000-24-2-1	Cat. #2113.00 Model #1000-36-2-1	Cat. #2113.01 Model #1000-48-2-1	–
3000 A – 1 mV/A	Cat. #2112.46 Model #3000-24-1-1	Cat. #2112.48 Model #3000-36-1-1	Cat. #2112.49 Model #3000-48-1-1	–
300/3000 A – 10/1 mV/A	Cat. #2113.05 Model #3000-24-2-1	Cat. #2112.00 Model #3000-36-2-1	Cat. #2112.01 Model #3000-48-2-1	–
6000 A – 0.1 mV/A	Cat. #2112.62 Model #6000-24-1-0.1	Cat. #2112.64 Model #6000-36-1-0.1	Cat. #2112.65 Model #6000-48-1-0.1	Cat. #2112.66 Model #6000-60-1-0.1
600/6000 A – 1/0.1 mV/A	Cat. #2113.19 Model #6000-24-2-0.1	Cat. #2113.21 Model #6000-36-2-0.1	Cat. #2113.22 Model #6000-48-2-0.1	Cat. #2113.23 Model #6000-60-2-0.1
10,000 A – 0.1 mV/A	Cat. #2112.70 Model #10000-24-1-0.1	Cat. #2112.72 Model #10000-36-1-0.1	Cat. #2112.73 Model #10000-48-1-0.1	Cat. #2112.74 Model #10000-60-1-0.1
1000/10,000 A – 1/0.1 mV/A	Cat. #2113.27 Model #10000-24-2-0.1	Cat. #2112.02 Model #10000-36-2-0.1	Cat. #2112.03 Model #10000-48-2-0.1	Cat. #2113.29 Model #10000-60-2-0.1
30,000 A – 0.1 mV/A	Cat. #2112.78 Model #30000-24-1-0.1	Cat. #2112.80 Model #30000-36-1-0.1	Cat. #2112.81 Model #30000-48-1-0.1	Cat. #2112.82 Model #30000-60-1-0.1
3000/30,000 A – 1/0.1 mV/A	Cat. #2113.33 Model #30000-24-2-0.1	Cat. #2113.35 Model #30000-36-2-0.1	Cat. #2113.36 Model #30000-48-2-0.1	Cat. #2113.37 Model #30000-60-2-0.1
Accessories				
Banana (female) – BNC (male) Adaptor (XM-BB) Cat. #2118.46				