

# OSCILLOSCOPES & PROBES CHANNEL PARTNERS EUROPE SALES & MARKETING SESSION

November 24, 2020



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**ROHDE & SCHWARZ**

Make ideas real



# AGENDA

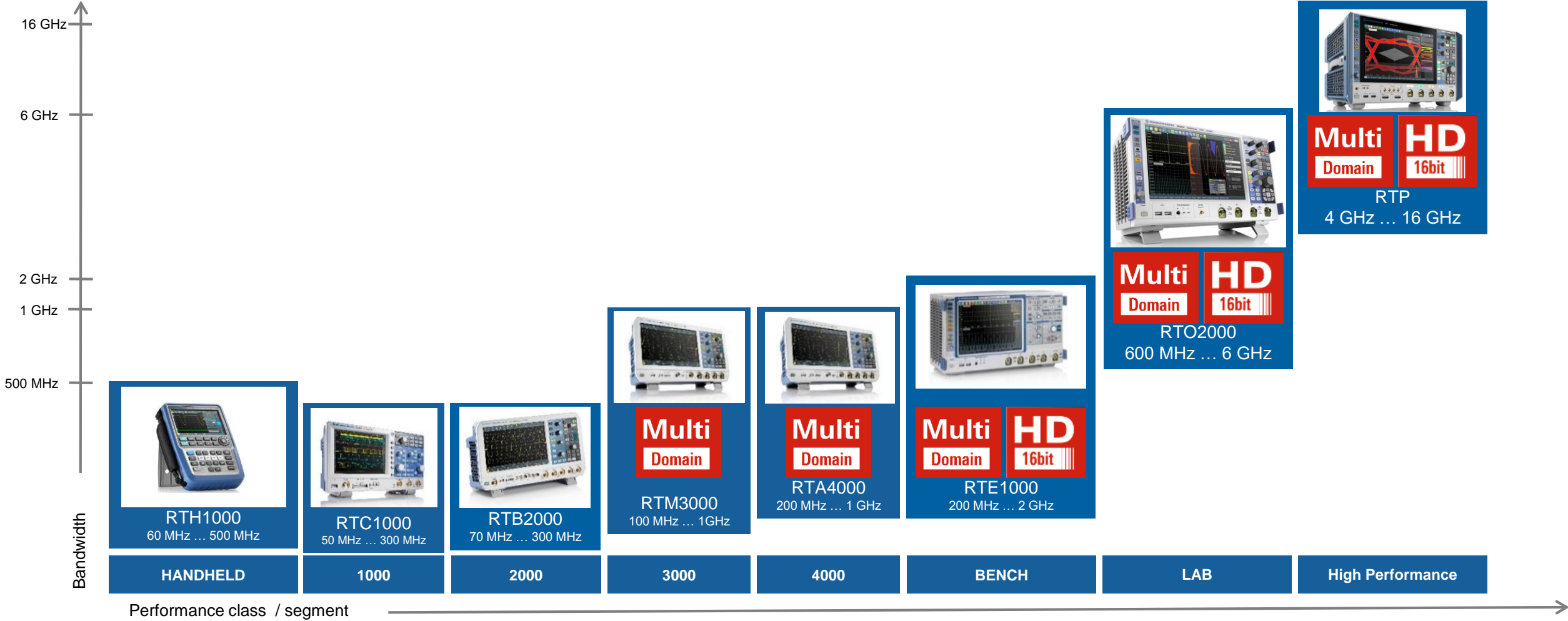
- **R&S Oscilloscope Portfolio**
- **R&S Probes Portfolio**
- **2020 Roadmap**
- **Promotions**
- **Q&A**

# AGENDA

- **R&S Oscilloscope Portfolio**
- **R&S Probes Portfolio**
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# R&S OSCILLOSCOPE PORTFOLIO

## MOST MODERN SCOPE LINE FROM 50 MHz TO 16 GHz



# R&S® RTH1000 SCOPERIDER

## LAB PERFORMANCE IN A RUGGED AND PORTABLE DESIGN

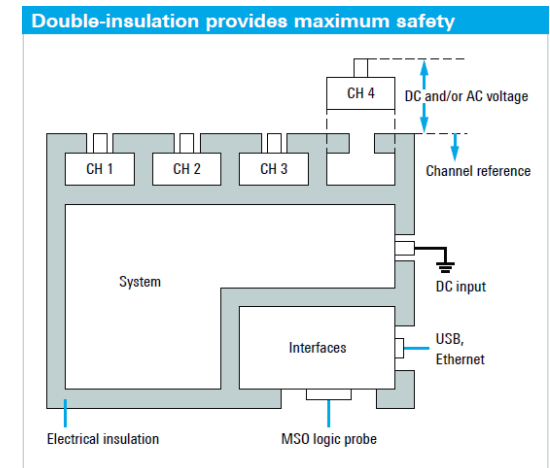
### ► Unique Features

- Deep memory, fastest update rate, 10-bit ADC and best trigger system give lab performance in the handheld form factor
- Isolated inputs with up to CAT IV rating, IP51 housing, integrated Ethernet
- 8 in 1: Integrated scope, multimeter, protocol analyzer\*, MSO\*, data logger, counter\*, Spectrum Analyzer\* and harmonics Analyzer\*



### RTH1000 Key Specifications

Model	Bandwidth	Sampling Rate	Number of Channels		Max. Update Rate	Max. Bits of Resolution	Max Memory (per ch / 1 ch active)
			Analog	Digital*			
RTH1054/52	500 MHz	RTH1004: 1.25 GSa/s per channel 2.5 GSa/s (2 ch. Interlea.)	2 / 4	8	50 000 wfms/s	9	125 kSa / 500 kSa,
RTH1034/32	350 MHz						
RTH1024/22	200 MHz	RTH1002: 2.5 GSa/s per channel 5 GSa/s (2 ch. Interlea.)	2 / 4	8	50 000 wfms/s	9	
RTH1014/12	100 MHz						
RTH1004/02	60 MHz						

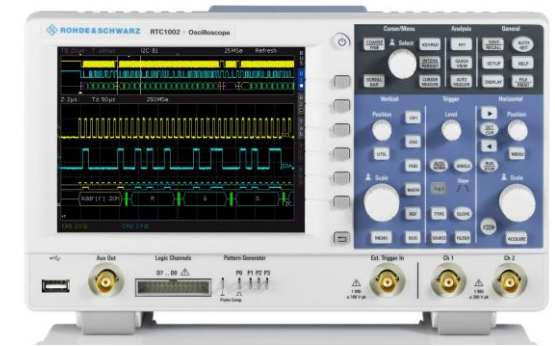


\* Option required

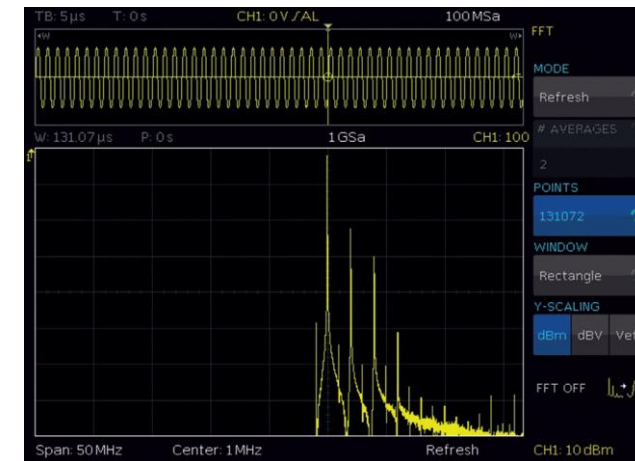
# R&S®RTC1000 GREAT VALUE

## ► Unique Features

- Deep memory standard
- Low Noise w/ up to 16-bits of resolution
- 8-in-1 Integration (Standard pattern generator, FG, component tester, DVM, 6-digit counter, MSO and protocol analysis\*)



RTC1000 Key Specifications							
Model	Bandwidth	Sampling Rate	Number of Channels		Max. Update Rate	Max. Bits of Resolution	Max Memory (per ch / 1 ch active)
			Analog	Digital*			
RTC1002	300MHz	1 GSa/s per channel 2 GSa/s (2 ch. Interlea.)	2	8	10 000 wfms/s	16 with HiRes decimation	1 MSa / 2 MSa
RTC1002	200MHz						
RTC1002	100MHz						
RTC1002	70MHz						
RTC1002	50MHz						



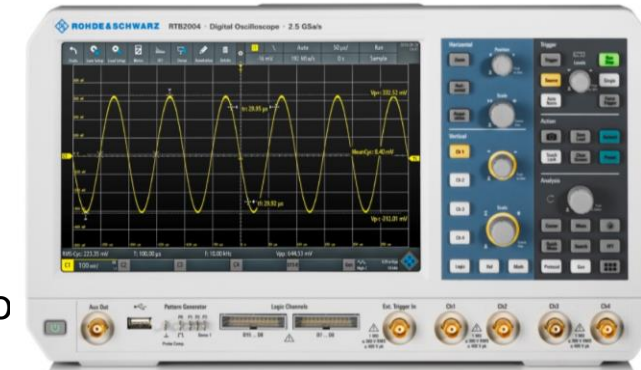
\* Option required

# R&S®RTB2000

## POWER OF TEN

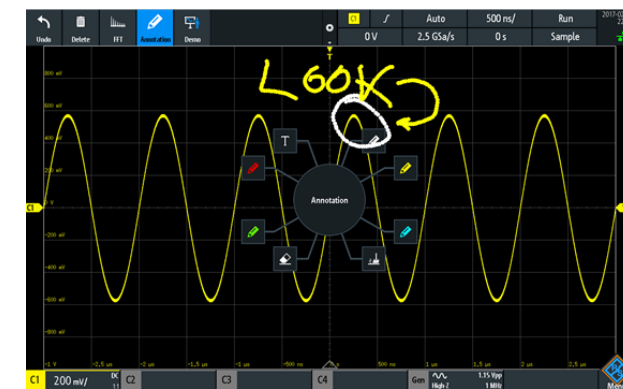
### ► Unique Features

- See sharper waveforms with the class-first 10-bit ADC
- Easily see the waveform and control the scope with a standard class-first 10" Capacitive Touch Display
- Capture long acquisitions at high sample rates with standard 10 MSample Memory (up to 160MSa with History/Segmented\*)



### RTB2000 Key Specifications

Model	Bandwidth	Sampling Rate	Number of Channels		Max. Update Rate	Max. Bits of Resolution	Max Memory (per ch / 1 ch active)
			Analog	Digital*			
RTB2004/02	300 MHz	1.25 GSa/s per channel 2.5 GSa/s (2 ch. Interlea.)	2 / 4	16	50 000 wfms/s	16 with HiRes decimation	10 MSa / 20 MSa
RTB2004/02	200 MHz						
RTB2004/02	100 MHz						
RTB2004/02	70 MHz						



Documentation made easy with on screen annotation

\* Option required



# R&S®RTM3000 POWER OF TEN



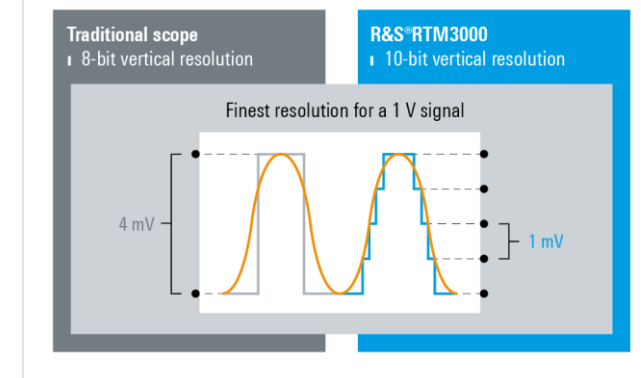
## ► Unique Features

- See sharper waveforms with the class-first 10-bit ADC
- Easily see the waveform and control the scope with a standard class-first 10" Capacitive Touch Display
- Capture long acquisitions at high sample rates with standard 40 MSample Memory (up to 400MSa with History/Segmented\*)
- Fast spectrum analysis \*



RTM3000 Key Specifications							
Model	Bandwidth	Sampling Rate	Number of Channels		Max. Update Rate	Max. Bits of Resolution	Max Memory (per ch / 1 ch active)
			Analog	Digital*			
RTM3004/02	1 GHz	2.5 GSa/s per channel 5 GSa/s (2 ch. Interlea.)	2 / 4	16	> 64.000 wfms/s	16 with HiRes decimation	40 MSa / 80 MSa
RTM3004/02	500 MHz						
RTM3004/02	350 MHz						
RTM3004/02	200 MHz						
RTM3004/02	100 MHz						

10-bit A/D converter: uncovers even small signal details



\* Option required



# R&S®RTA4000

## POWER OF TEN



### ► Unique Features

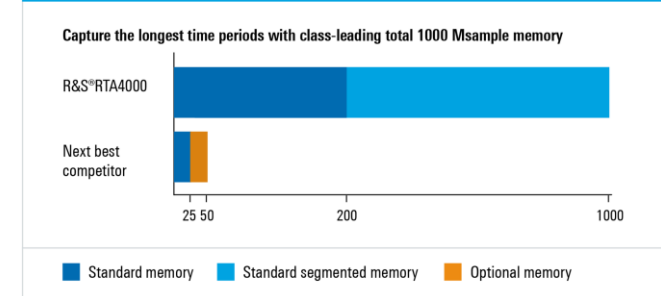
- Best signal integrity in class with 10-bit ADC, 500µV/Div, lowest noise and ultra stable timebase
- Capture long acquisitions at high sample rates with standard 100 MSample Memory (up to 1000MSa with History/Segmented)
- Fast spectrum analysis \*



### RTA4000 Key Specifications

Model	Bandwidth	Sampling Rate	Number of Channels		Max. Update Rate	Max. Bits of Resolution	Max Memory (per ch / 1 ch active)
			Analog	Digital*			
RTA4004	1 GHz	2.5 GSa/s per channel 5 GSa/s (2 ch. Interlea.)	4	16	> 64.000 wfms/s	16 with HiRes decimation	100 MSa / 200 MSa
RTA4004	500 MHz						
RTA4004	350 MHz						
RTA4004	200 MHz						

8 to 20 times more memory depth compared to traditional oscilloscopes in the same instrument class



\* Option required

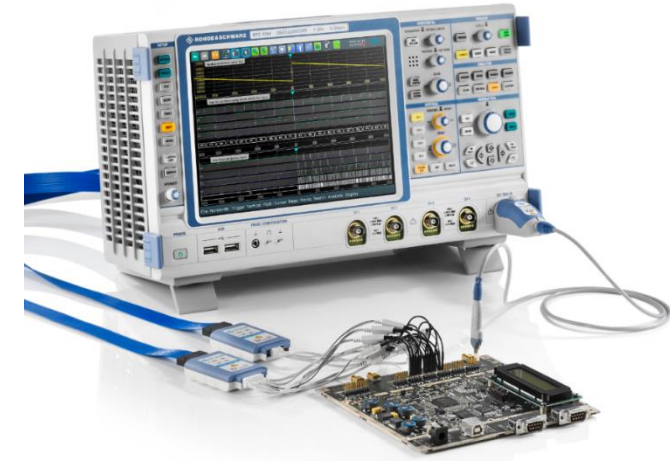
# R&S® RTE1000

## TRULY UNCOMPROMISED IN PERFORMANCE



### ► Unique Features

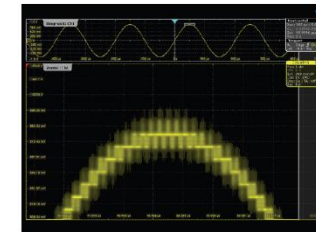
- Best scope update rate, memory depth, digital triggering
- Fully upgradable (Bandwidth, MSO, Analysis)
- HW based Spectrum Analysis with DDC
- Class leading low noise with up to 16-bits of resolution



### RTE1000 Key Specifications

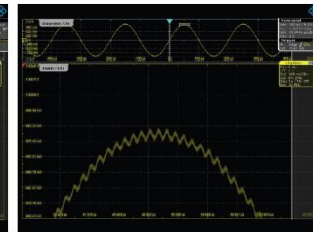
Model	Bandwidth	Sampling Rate	Number of Channels		Max. Update Rate	Max. Bits of Resolution*	Max Memory (per ch / 1 ch active)
			Analog	Digital*			
RTE1204/02	2 GHz	5 GSa/s per channel	2 / 4	16	> 1 Mio wfms/s	16 in HD Mode	Standard: 50 MSa / 200 MSa
RTE1154/52	1,5 GHz						
RTE1104/02	1 GHz						
RTE1054/52	500 MHz						
RTE1034/32	350 MHz						
RTE1024/22	200 MHz						

HD Mode Off



Quantization steps clearly visible.

HD Mode On



"Hidden" low level signal becomes visible. Signal characteristics can be measured.

## TURN YOUR SIGNALS INTO SUCCESS

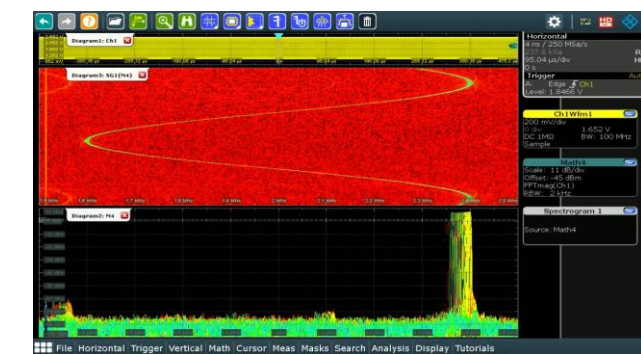


### ► Unique Features

- Best scope update rate, memory depth, digital triggering
- Fully upgradable in Bandwidth, MSO, TDR/TDT Analysis incl. Pulse source\*
- advanced Jitter decomposition\*
- Fast spectrum analysis with zone triggering in both time and freq. domain\*
- Class leading low noise with up to 16-bits of resolution



RTO2000 Key Specifications							
Model	Bandwidth	Sampling Rate	Number of Channels		Max. Update Rate	Max. Bits of Resolution	Max Memory (per ch / 1 ch active)
			Analog	Digital*			
RTO2064	6 GHz	10 GSa/s per channel 20 GSa/s (2 ch. Interlea.)	4	16	> 1 Mio wfms/s	16 in HD Mode	Standard: 50 MSa / 200 MSa, Max: 1 GSa / 2 GSa
RTO2044	4 GHz						
RTO2034/32	3 GHz	10 GSa/s per channel	2 / 4	16			
RTO2024/22	2 GHz						
RTO2014/12	1 GHz						
RTO2004/02	600 MHz						



## SIGNAL INTEGRITY IN REALTIME

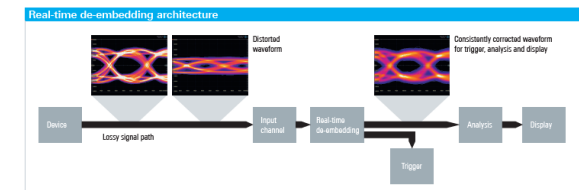
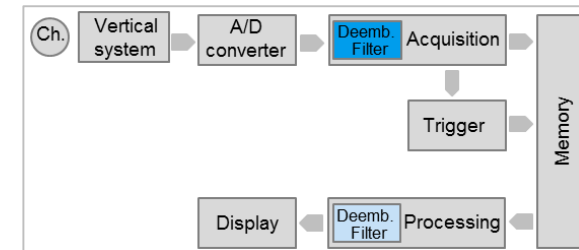


### ► Unique Features

- Realtime deembedding, incl. triggering on de-embedded signals
- High speed serial Trigger up to 16Gbit/s\*, advanced Jitter decomposition\*
- Best scope update rate, memory depth, trigger capabilities
- Fast spectrum analysis with zone triggering in both time and freq. domain\*
- Fully upgradable up to 16 GHz, memory, MSO, TDR/TDT Analysis incl. Pulse source\*
- Most compact high-performance instrument platform



RTP Key Specifications							
Model	Bandwidth	Sampling Rate	Number of Channels		Max. Update Rate	Max. Bits of Resolution	Max Memory (per ch / 1 ch active)
			Analog	Digital*			
RTP164	16 GHz	20 GSa/s per channel 40 GSa/s (2 ch. Interlea.)	4	16	750.000 wfms/s	16 in HD Mode	Standard: 50 MSa / 200 MSa, Max: 1 GSa / 2 GSa
RTP134	13 GHz						
RTP084	8 GHz						
RTP064	6 GHz						
RTP044	4 GHz						



\* Option required

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- **R&S Probes Portfolio**
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# THE ROHDE & SCHWARZ PROBE PORTFOLIO



High voltage



Single ended compact



Differential modular



EMC near field



Power rail



Standard



Broadband



Differential High voltage



Differential compact



Precise V&I Multichannel



Current

PASSIVE

ACTIVE

SPECIALIZED





# PROBES FOR MEASURING HIGH VOLTAGE LEVELS

## GENERAL PURPOSE HIGH-VOLTAGE DIFFERENTIAL PROBES

- ▶ 25 MHz and **100 MHz** Bandwidth
- ▶ 750 V<sub>peak</sub> and 1400 V<sub>peak</sub> input voltage
- ▶ BNC Interface
- ▶ BNC interface fits to all scopes / applications
- ▶ Cost-effective differential solution



# PROBES FOR MEASURING HIGH VOLTAGE LEVELS ISOLATED CHANNEL OSCILLOSCOPE – RTH FAMILY

- ▶ 60 MHz, 100 MHz, 200 MHz, **350 MHz** and **500 MHz** models
- ▶ Unique combination of channel isolation for up to 1000 Vrms and 500 MHz bandwidth
- ▶ Isolated channels → no need for differential probes
- ▶ CAT IV 600 V, CAT III 1000 V with R&S®RT-ZI10 or R&S®RT-ZI11 probe
- ▶ **High CMRR** > 100 dB @ DC – 100 kHz
- ▶ Up to **16 bit vertical resolution** with High resolution mode



# PROBES FOR MEASURING HIGH VOLTAGE LEVELS

## HIGH-VOLTAGE DIFFERENTIAL PROBES – RT-ZHD FAMILY

- ▶ **100 MHz and 200 MHz models**
- ▶ **750 V, 1500 V and 6000 V Input Voltage Range**
- ▶ **Up to 2000 V Offset Compensation**
  - Independent of probe attenuation factor or vertical scale on oscilloscope
- ▶ **Excellent DC Accuracy: 0.5%**
  - Integrated DC Voltmeter with 0.1% Accuracy
  - Very low drift
- ▶ **Very low noise**
- ▶ **High CMRR**
  - 80 dB @ DC – 60 Hz
  - 60 dB @ 1 MHz
  - 30 dB @ 100 MHz
- ▶ **Overrange Indicator,**  
integrated 5 MHz low pass filter, R&S probe interface



# RT-ZHD PROBES

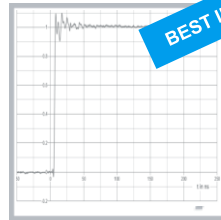
## UNIQUE FEATURESET

Summary: Key parameters and characteristics for selecting high voltage probes

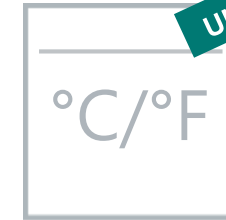
### High measurement accuracy



Low noise



High linearity and small zero error

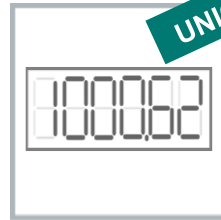


High temperature stability

### Versatile range of applications



High DC-Offset range  
*(e.g. +/-2000 V with 25 mV/div)*



Precise voltage measurements  
*(0.1% via R&S®ProbeMeter)*

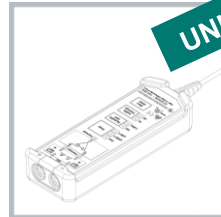


Measurements in CAT III conditions

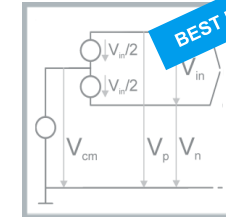
### Easy operation



Control the oscilloscope via probe



DC common mode voltage always readable  
*(R&S®ProbeMeter)*



Automatic divider setting and over-voltage display

# AGENDA

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# RTH SCOPERIDER FIRMWARE UPDATES 2020



RTH

Q1 2020

## FW1.80.3.1

- New option R&S®RTH-K38 User scripts
- Channel invert
- New measurements area, V PWM, f PWM, V/f PWM
- Protocol decode tables: time resolution increased to higher number of digits
- Cursor movement via flywheel, improved behavior when going from large scale to small scale and vice versa.

# 2000/3000/4000 BENCH SCOPES FIRMWARE UPDATES 2020

Q1 2020	Q4 2020
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**RTA4000**

### FW1.6

- Launch of K37 Spectrum Analysis option for all RTM/RTAs
- Action on Trigger (production):
  - Beep
  - Print/Screenshots
  - Save wfms.

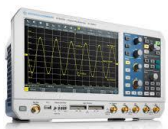


**RTM3000**

- Action on Single shot – save waveforms in reference (production)
- Measurement Delay Direction
- Delta Time Measurement Accuracy
- Attenuation factor of 2,500,000 (power electronics)
- Support of measurement modes of RT-ZM probes: (P, N, CM, DM)
- Bug fixes

### FW2.3

- Configuration function 'Action on Trigger'
- FFT vertical scaling dB $\mu$ V
- Individual color selection for every math waveform
- Attenuation factor of 10M for Unit 'V'
- Bug fixes



**RTB2000**



# RTO/RTP SCOPES FIRMWARE UPDATES 2020

Q4 2020



**RTO**

**FW4.80**

RTO/RTP:

RTx-K58: 1000Base-T1 T&D

RTx-K89: 10Base-T1L Compliance

RTx-K134: Jitter & Noise Decomposition



**RTP**

RTP:

RTP-K83: PCIe Gen3 Compliance

RTP-K101: USB 3.2 Gen1&2 Compliance

# PROBES

## NEW LAUNCH 2020: RT-ZC31 CURRENT PROBE

### Specs & Highlights

- Three sensitivity ranges current probe
  - 0.1 V/A (30A)
  - 1 V/A (5A)
  - 10 V/A (0.5A)
- High sensitivity gain
- Very low noise (60  $\mu$ Arms)

### Ideal for these applications

- Measurement of small current
- Ripple and noise measurement
- Switching analysis with high bandwidth
- Inrush, micro, and high-speed currents



# OVERVIEW: R&S OSCILLOSCOPE EDU EDITION

- ▶ **Launch November 1st, 2020**
- ▶ **Target Groups**
  - Universities
  - Educational institutions
- ▶ **Main Benefits**
  - EDU Edition unlocks the rich functionality with **all software options** of Rohde & Schwarz **R&S®RTC1002, R&S®RTB2002** and **R&S®RTB2004** oscilloscopes for a very attractive price:
    - **Triggering and Decoding** for: **I<sup>2</sup>C, SPI, UART/RS-232/RS-422/RS-485, CAN** and **LIN** signals
    - The **arbitrary waveform generator** and **pattern generator** option
    - On R&S®RTB2002 and R&S®RTB2004, it additionally includes history and **segmented memory, frequency response analysis (Bode plot)**

Benefits	
<b>Full functions</b>	You get the full functionality of all options for the R&S®RTC1002, R&S®RTB2002 and R&S®RTB2004 oscilloscopes
<b>Long term availability</b>	The EDU Edition are products and therefore available without a time or quantity limit
<b>Attractive price</b>	The EDU Edition offers a saving of up to 33% compared to purchasing regular units with EDU discount

# RTB2000 COMPETITION



Parameter	R&S®RTB2000	Keysight 1000 X-Series EDU version	Keysight 2000 X-Series	Tektronix TBS2000B
<b>Acquisition system</b>				
Channels	4/2 for all models	4/2 for all models	4/2 for all models	4/2 for all models
Bandwidth (MHz)	70/100/200/ <b>300 MHz</b> (upgradable)	50/70/100 MHz (upgradable)	70/100/200 MHz (upgradable)	70/100/200 MHz (upgradable)
ADC resolution	<b>10-bit</b>	8-bit	8-bit	8-bit
Max. resolution	<b>16-bit</b> with high resolution	12-bit with averaging	12-bit with averaging	8-bit
Max. realtime sampling rate	<b>2.5 Gsample/s</b>	1 Gsample/s EDU version	2 Gsample/s	2 Gsample/s
Standard memory depth	<b>10 Msample</b> per ch all channels <b>20 Msample</b> interleaved	200 ksample EDU version	0.1 Msample per ch all channels 1 Msample optional	5 Msample per ch all channels
Segmented memory depth/history mode	<b>optional – 160 Msample</b>	–	–	–
Waveform update rate	50 000 waveforms/s standard <b>300 000 waveforms/s</b> in fast segmented memory mode	100 000 waveforms/s standard	200 000 waveforms/s standard	10 000 waveforms/s standard
MSO sampling rate / memory	<b>1.25 Gsample/s, 16 digital channels / 10 Msample, upgradeable</b>	1 Gsample/s, 8 digital channels / 12.5 ksample, 125 ksample optional	1 Gsample/s, 8 digital channels / 12.5 ksample, 125 ksample optional	–
Hardware input sensitivity	<b>1 mV</b>	4 mV	4 mV	2 mV
<b>X-in-1 oscilloscope</b>				
Serial decode options	I <sup>2</sup> C, SPI, UART/RS-232/422/485, CAN, LIN (analog <b>and</b> digital channels)	I <sup>2</sup> C, SPI, UART/RS-232/422/485, CAN, LIN (on analog channel only)	I <sup>2</sup> C, SPI, UART/RS-232/422/485, CAN, LIN (on analog channel only)	–
Generator option	<b>function and arbitrary, 4-bit pattern, SW license</b>	function only & separate HW	function only	–
Frequency Response Analysis (Bode Plot)	<b>yes</b>	yes only with Generator models	–	–
Multifunction	DVM, counter	DVM, counter	DVM, counter	counter
<b>Form factor</b>				
Display	<b>10.1" (1280 x 800)</b>	7" (800 x 480)	8.5" (800 x 480)	9" (800 x 480)
Touchscreen	<b>yes – capacitive</b>	–	–	–
Grid annotation	<b>yes</b>	–	–	–
Boot time	<b>~ 10 s</b>	~ 50 s	~ 50 s	~ 30 s
Dimensions	390 mm x 220 x 152 mm	314 mm x 265 mm x 130 mm	370 mm x 252 mm x 148 mm	413 x 202 x 128 mm (4 ch), 372 x 175 x 103 mm (2 ch)
Weight	<b>2.5 kg</b>	3.2 kg	3.9 kg	4.2 kg (4 ch), 2.6 kg (2 ch)

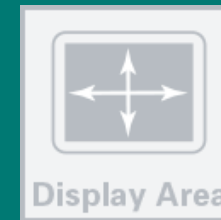
## Technical outperforms competition



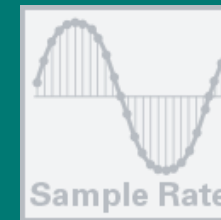
**4 x**  
More ADC resolution



**100 x**  
More memory






**Touch**  
More display area



**2.5 x**  
More sample rate

# ORDERING INFORMATION AND PRICING

Type	Description	Order No.	EDU Edition ME List prices	EDU Edition End Customer prices - Public (no further discount to customers)	EDU Edition CP Order price
<b>R&amp;S®RTC1002EDU</b> 	<b>R&amp;S®RTC1002 EDU Oscilloscope, 50MHz, 2ch</b> <b>R&amp;S®RTC-PK1 Application Bundle</b> <ul style="list-style-type: none"> <li>R&amp;S®RTC-K1 – I<sup>2</sup>C/ SPI T&amp;D</li> <li>R&amp;S®RTC-K2 – UART/RS232 T&amp;D</li> <li>R&amp;S®RTC-K3 – CAN/LIN T&amp;D</li> <li>R&amp;S®RTC-B6 – Function Generator</li> </ul>	<b>1335.7500P92</b>	<b>€ 1,129</b>	<b>€ 790</b>	<b>€ 632</b>
<b>R&amp;S®RTB2002EDU</b> 	<b>R&amp;S®RTB2002 EDU Oscilloscope, 70MHz, 2ch</b> <b>R&amp;S®RTB-PK1 Application Bundle</b> <ul style="list-style-type: none"> <li>R&amp;S®RTB-K1 – I<sup>2</sup>C/ SPI T&amp;D</li> <li>R&amp;S®RTB-K2 – UART/RS232 T&amp;D</li> <li>R&amp;S®RTB-K3 – CAN/LIN T&amp;D</li> <li>R&amp;S®RTB-K15 – History &amp; Segmented Mem.</li> <li>R&amp;S®RTB-K36 – Freq. Response Analysis</li> <li>R&amp;S®RTB-B6 – ARB. Generator</li> </ul>	<b>1333.1005P92</b>	<b>€ 1,700</b>	<b>€ 1,190</b>	<b>€ 952</b>
<b>R&amp;S®RTB2004EDU</b> 	<b>R&amp;S®RTB2004 EDU Oscilloscope, 70MHz, 4ch</b> <b>R&amp;S®RTB-PK1 Application Bundle</b> <ul style="list-style-type: none"> <li>R&amp;S®RTB-K1 – I<sup>2</sup>C/ SPI T&amp;D</li> <li>R&amp;S®RTB-K2 – UART/RS232 T&amp;D</li> <li>R&amp;S®RTB-K3 – CAN/LIN T&amp;D</li> <li>R&amp;S®RTB-K15 – History &amp; Segmented Mem.</li> <li>R&amp;S®RTB-K36 – Freq. Response Analysis</li> <li>R&amp;S®RTB-B6 – ARB. Generator</li> </ul>	<b>1333.1005P94</b>	<b>€ 2,557</b>	<b>€ 1,790</b>	<b>€ 1,432</b>

# CUSTOMER BENEFITS WITH THE EDU EDITION

- ▶ EDU Editions are Products, availability is not limited in Time or Quantity like Promotions, which allow long term budgeting
- ▶ EDU Editions allow further savings for Educational customers (between 3% to 33%) compared to Standard products
- ▶ EDU Editions does not limit functionality compared to Standard products
- ▶ EDU Editions are fully upgradable (up to 300 MHz Bandwidth, MSO Option)
- ▶ EDU Editions work seamless with R&S Campus Dashboard Teaching software for multi-user student labs

# AGENDA

- **R&S Oscilloscope Portfolio**
- **R&S Probes Portfolio**
- **2020 Roadmap**
- **Promotions**
- **Q&A**



# FULL BENCH, HIGH VALUE: UP TO 50% OFF OUR SIGNATURE INSTRUMENT BUNDLES PRECONFIGURED FOR YOU

## ► Future-proof your investment

- Options included upfront at point of purchase
- No need to configure, we take care of this for you
- Single price for each instrument
- Maximum bench performance and maximum savings



R&S®RTB2000  
300 MHz oscilloscope  
**41 % discount**



R&S®RTM3000  
500 MHz oscilloscope  
**47 % discount**



R&S®RTA4004  
1 GHz oscilloscope  
**52 % discount**



R&S®RTE1000  
2 GHz oscilloscope  
**49 % discount**

# WIDEST PRODUCT RANGE IN A SINGLE PROMOTION

## UP TO 50% SAVINGS ON MOST POPULAR CONFIGURATIONS

► DISCOVER POPULAR INSTRUMENT BUNDLES UNTIL MARCH 31, 2021

R&S Model	Bandwidth/ channels	Product bundle description	List price Europe	Discount
<b>RTC1K-COM2</b>	300 MHz/ 2 analog / 8 digital	R&S@RTC1002: WG, MSO, I <sup>2</sup> C, SPI, UART/RS-232/RS-422/RS-485, CAN/LIN	<del>2.540€</del> <b>1.390 €</b>	<b>45%</b>
<b>RTB2K-COM4</b>	300 MHz/ 4 analog / 16 digital	R&S@RTB2004: AWG, MSO, I <sup>2</sup> C, SPI, UART/RS-232/RS-422/RS-485, CAN/LIN, frequency response analysis, history and segmented memory	<del>5.735€</del> <b>3.390 €</b>	<b>41%</b>
<b>RTM3K-54PK</b>	500 MHz/ 4 analog / 16 digital	R&S@RTM3004: AWG, MSO, I <sup>2</sup> C, SPI, UART/RS-232/RS-422/RS-485, I <sup>2</sup> S LJ/RJ/TDM, MIL-1553, ARINC 429, CAN/LIN, power analysis, frequency response analysis, history and segmented memory, spectrum analysis	<del>14.220€</del> <b>7.490 €</b>	<b>47%</b>
<b>RTA4K-COM4</b>	1 GHz/ 4 analog / 16 digital	R&S@RTA4004: AWG, MSO, I <sup>2</sup> C, SPI, UART/RS-232/RS-422/RS-485, I <sup>2</sup> S LJ/RJ/TDM, MIL-1553, ARINC 429, CAN/LIN, power analysis, frequency response analysis, history and segmented memory, spectrum analysis	<del>20.950€</del> <b>9.990 €</b>	<b>52%</b>
<b>RTE-COM4</b>	2 GHz/ 4 analog / 16 digital	R&S@RTE1204: MSO, I <sup>2</sup> C, SPI, UART/RS-232/RS-422/RS-485, CAN/LIN, CAN-FD, CXPI, Flex-Ray, SENT, I <sup>2</sup> S, MIL-1553, ARINC 429, Space Wire, MIPI RFFE, Custom decode, MDIO, USB1.0/1.1/2.0/HSIC, power analysis, spectrum analysis, Ethernet 100 BASE-T1, bus measurements	<del>31.970€</del> <b>17.740 €</b>	<b>49%</b>
<b>RTH1K-COM4</b>	500 MHz/ 4 analog / 8 digital	R&S@RTH1004: MSO, I <sup>2</sup> C, SPI, UART/RS-232/RS-422/RS-485, CAN/LIN, CAN-FD, SENT, spectrum analysis, frequency counter, advanced trigger, harmonic analysis, remote control, history and segmented memory	<del>11.270€</del> <b>7.390 €</b>	<b>34%</b>

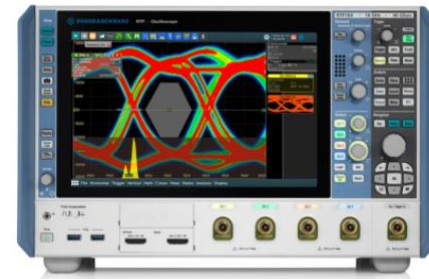
# BOOST YOUR BANDWIDTH: FREE BANDWIDTH UPGRADE RTO / RTP: SAVE UP TO 20,630 EUR

- ▶ Purchase a new RTO2000 / RTP oscilloscope, we will upgrade it one bandwidth level, for free!
  - Bandwidth is the most important aspect of an oscilloscope
  - Savings of up to **20,630 €**
- ▶ **Conditions:**
  - This offer is valid from August 11, 2020 until December 31, 2020.
  - This oscilloscope promotion cannot be combined with any other discount scheme.
  - This offer is only applicable for 4 channel models of R&S®RTO2000 or R&S®RTP oscilloscope.



R&S®RTO2000 oscilloscope

- | Bandwidth: 600 MHz to 6 GHz
- | Max. sample rate: 20 Gsample/s
- | Max. memory depth: 2 Gsample
- | Up to 16-bit vertical resolution
- | MSO: 16 digital channels, optional, retrofittable



R&S®RTP oscilloscope

- | Bandwidth: 4 GHz to 16 GHz
- | Max. sample rate: 40 Gsample/s
- | Max. memory depth: 2 Gsample
- | Realtime deembedding
- | All trigger events at full bandwidth
- | Up to 16 bit resolution

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**THANK YOU**