ROHDE&SCHWARZ
Make ideas real

R&S®RTA4000 OSCILLOSCOPES
Power of 10

The perfect choice for

R&D debugging – power supplies	**R&D debugging – serial buses**
R&D debugging – EMI	**Manufacturing test and repair**

Key specifications	
Bandwidth	200 MHz, 350 MHz, 500 MHz, 1 GHz
Channels	4 analog channels + 16 digital channels (with MSO option)
ADC	10-bit
Max sample rate	5 Gsample/s (interleaved), 2.5 Gsample/s (all channels)
Memory	100 Msample, 200 Msample (interleaved), 1 Gsample (1000 Msample) history standard
Display	10.1" capacitive touch, 1280 × 800 pixel resolution
Boot time	10 seconds
Connectivity	LAN, USB host/device, fast display over Ethernet
upgradeable	Bandwidth, protocol trigger and decode, MSO, pattern generator and arbitrary waveform generator
Probe interface	Probe power and auto configuration
Warranty	Standard 3-year

See more of your signal with the power of 10

What sets these scopes apart from all others in their class?
New, advanced technology.

► Rohde & Schwarz 10-bit ADC
► 500 µV/div hardware setting with full bandwidth and low noise
► 1000 Msample total standard memory, optimal for serial protocol analysis

Your benefit	Features
See small signal details in the presence of large signals	10-bit ADC. Class-leading signal integrity paired with 500 µV/div hardware setting with full bandwidth and low noise
Easier to see and collaborate. Faster to operate and interpret results.	10.1" capacitive touch screen with 1280 × 800 pixel resolution. Grid annotation. Split window, R&S®SmartGrid.
Capture more time at full bandwidth	5 Gsample/s max. sample rate with up to 200 Msample memory. 12 horizontal grid lines. 1 Gsample history mode. Class-leading timebase accuracy.
Troubleshoot and solve a wide range of problems with one instrument.	X-in-1 oscilloscope. Oscilloscope, logic analyzer, spectrum analyzer, protocol analyzer, frequency response analyzer, arbitrary waveform generator, pattern generator, counter, digital voltmeter.

▷ For more information, visit www.rohde-schwarz.com/catalog/RTA4000

Unrivaled signal integrity and deep memory

► Superb noise values allow you to see more of your signal
► Rohde & Schwarz 10-bit ADC
► 500 µV/div hardware setting with full bandwidth and low noise
► Capture more time at full bandwidth
► Deep memory: 100 Msample per channel (standard) and 200 Msample (interleaved)
► Class-leading timebase accuracy ensures deep memory measurement accuracy
► Standard history function with over 1000 Msample of memory allows you to look back at potentially tens of thousands of trigger events

X-in-1 oscilloscope
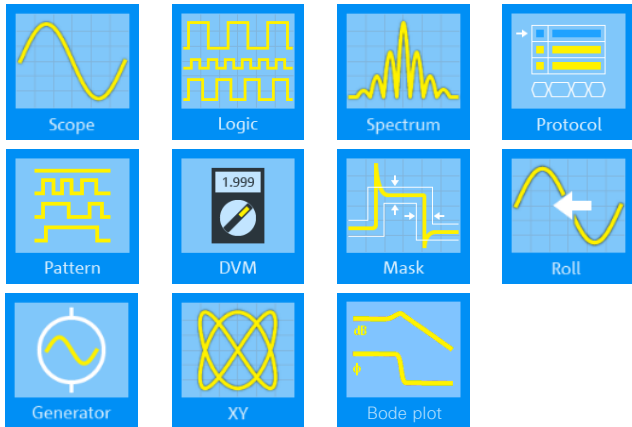
Oscilloscope: standard
Logic analyzer (16-channel MSO): R&S®RTA-B1 option. MSO option includes cabling, lead sets and grabbers.
Spectrum analyzer: R&S®RTA-K18 option. Spectrogram.
Protocol analyzer: options via serial bus
Pattern generator (4 bits): R&S®RTA-B6 option
Integrated digital voltmeter: standard
Waveform generator (25 MHz): R&S®RTA-B6 option
Frequency response analyzer: R&S®RTA-K36 option, Bode plot
Trigger counter: standard

Ordering information
Step 1: choose your oscilloscope model [1)]

Four-channel model	R&S®RTA4004

[1)] All models include the R&S®RT-ZP10 passive probes for each channel, and a power cord, and a 3-year warranty.
Languages supported: English, German, French, Spanish, Italian, Portuguese, Czech, Polish, Russian, simplified and traditional Chinese, Korean and Japanese.

Step 2: choose your bandwidth option

200 MHz bandwidth	standard
350 MHz bandwidth	R&S®RTA-B243
500 MHz bandwidth	R&S®RTA-B245
1 GHz bandwidth	R&S®RTA-B2410

Step 3: choose your options and accessories
Software options

Triggering and decoding	R&S®RTA-K1 I²C/SPI R&S®RTA-K2 UART/RS-232/422/485 R&S®RTA-K3 CAN/LIN R&S®RTM-K5 I²S audio R&S®RTM-K6 MIL-STD-1553 R&S®RTM-K7 ARINC-429
Spectrum analysis	R&S®RTA-K18
Power analysis	R&S®RTA-K31
Frequency response analysis (Bode plot)	R&S®RTA-K36
Application bundle	R&S®RTA-PK1 (-K1, -K2, -K3, -K5, -K6, -K7, -K18, -K31, -K36, -B6)

Hardware options

R&S®RTA-B1 mixed signal upgrade for non-MSO models, 400 MHz

R&S®RTA-B6 arbitrary waveform generator

Accessories

R&S®RTB-Z1 plastic front cover

R&S®RTB-Z3 soft carrying bag

R&S®RTB-Z4 transit case

R&S®ZZA-RTB2K rackmount kit

Step 4: choose your probes (others are available)

Power rail probe

2.0 GHz, 1:1, 50 kΩ, ±0.85 V, ±60 V offset, Rohde&Schwarz probe interface	R&S®RT-ZPR20

Active single-ended probes

1.0 GHz, 1 MΩ, Rohde&Schwarz probe interface	R&S®RT-ZS10E

Active differential probes

1.0 GHz, 1 MΩ, R&S®ProbeMeter, micro button, Rohde&Schwarz probe interface	R&S®RT-ZD10

Current probes

100 MHz, AC/DC, 0.1 V/A, 30 A (RMS), Rohde&Schwarz probe interface	R&S®RT-ZC20B

High voltage differential probes

100 MHz, 1000:1/100:1, 40 MΩ, 6000 Vpk, 1000 V CAT III, Rohde&Schwarz probe interface	R&S®RT-ZHD60