ROHDE & SCHWARZ
Make ideas real

R&S®RTM3000 OSCILLOSCOPES
Power of 10

The perfect choice for

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

Key specifications	
Bandwidth	100 MHz, 200 MHz, 350 MHz, 500 MHz, 1 GHz
Channels	2 or 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	40 Msample, 80 Msample (interleaved), 400 Msample history (optional with R&S®RTM-K15)
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

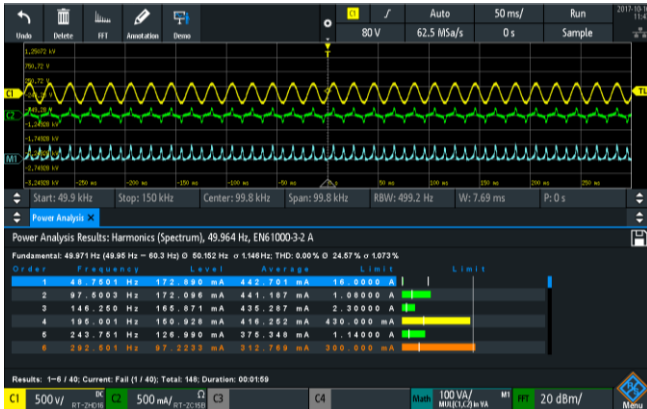What sets these scopes apart from all others in their class? New, advanced technology.
► Large 10.1" capacitive touch display
► Rohde & Schwarz 10-bit ADC
► 40 Msample acquisition memory depth on each channel (80 Msample when interleaved)
► 10 second boot time

Your benefit	Features
Easier to see and collaborate. Faster to operate and interpret results.	10.1" capacitive touch screen with 1280 × 800 pixel resolution. Grid annotation. Split dual window, R&S®SmartGrid
Capture more time at full bandwidth	5 Gsample/s max. sample rate with up to 80 Msample memory. 12 horizontal grid lines. 400 Msample history mode
See small signal details in the presence of large signals	10-bit ADC. 1280 × 800 pixel display resolution
Start working sooner	Boot time 10 s
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

Power highlights

► Analysis of input and output as well as the transfer function of switched-mode power supplies
► Measurement wizard for fast results
► Simple and fast documentation
► Analysis of harmonic current in line with conventional EN, MIL and RTCA standards

X-in-1 oscilloscope

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

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

Two-channel model	R&S®RTM3002
Four-channel model	R&S®RTM3004

[1] All models include the R&S®RT-ZP03 single-ended passive probe for each channel, power cord and 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

100 MHz bandwidth	Standard for two-channel and four-channel models
200 MHz bandwidth	R&S®RTM-B222 for R&S®RTM3002 R&S®RTM-B242 for R&S®RTM3004
350 MHz bandwidth	R&S®RTM-B223 for R&S®RTM3002 R&S®RTM-B243 for R&S®RTM3004
500 MHz bandwidth	R&S®RTM-B225 for R&S®RTM3002 R&S®RTM-B245 for R&S®RTM3004
1 GHz bandwidth	R&S®RTM-B2210 for R&S®RTM3002 R&S®RTM-B2410 for R&S®RTM3004

Step 3: choose your options and accessories
Software options

Triggering and decoding	R&S®RTM-K1 I²C/SPI R&S®RTM-K2 UART/RS-232/422/485 R&S®RTM-K3 CAN/LIN R&S®RTM-K5 I²S audio R&S®RTM-K6 MIL-STD-1553 R&S®RTM-K7 ARINC-429
History and segmented memory	R&S®RTM-K15 (400 Msample)
Spectrum analysis	R&S®RTM-K18
Power analysis	R&S®RTM-K31
Frequency response analysis (Bode plot)	R&S®RTM-K36
Application bundle	R&S®RTM-PK1 (-K1, -K2, -K3, -K5, -K6, -K7, -K15, -K18, -K31, -K36, -B6)

Hardware options

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

R&S®RTM-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