

# R&S® RTM3000 Oscilloscopes

## Power of 10



### The perfect choice for

R&D power integrity debugging

R&D serial bus debugging

Manufacturing testing 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. sampling rate	5 Gsample/s (interleaved), 2.5 Gsample/s (all channels)
Memory depth	40 Msample, 80 Msample (interleaved), 400 Msample in history mode (with R&S®RTM-K15 option)
Display	10.1" capacitive touch, 1280 x 800 resolution
Boot time	10 seconds
Connectivity	LAN, USB host/device, fast display over Ethernet
Upgradable	bandwidth, protocol trigger and decode, MSO, pattern generator and arbitrary waveform generator
Probe interface	probe power and auto configuration
Warranty	standard 3-year

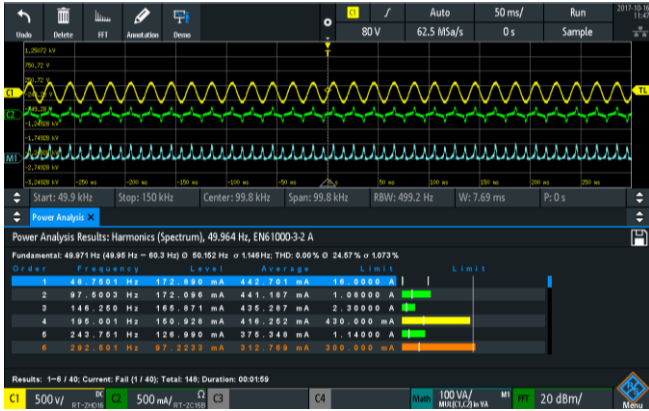
### See more of your signal with the power of 10

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

- Large 10.1" capacitive touchscreen
- Rohde & Schwarz designed 10-bit ADC
- 40 MSample (all channels) and 80 MSample (interleaved) acquisition memory depth
- 10 second boot time

Your benefit	Features
Easier to see and collaborate. Faster to operate and interpret results	10.1" capacitive touchscreen with 1280 x 800 resolution, grid annotation, split window, SmartGrid
Capture more time at full bandwidth	5 Gsample/s max sample rate with up to 80 Msample memory, 12 horizontal divisions, 400 Msample in history mode
See small signal detail in the presence of large signals	10-bit ADC, 1280 x 800 pixel display resolution
Start working sooner	10 second boot time
Troubleshoot and solve a wide range of problems with one instrument	8 instruments in one: oscilloscope, logic analyzer, spectrum analyzer, protocol analyzer, arbitrary waveform generator, pattern generator, counter, digital voltmeter

► For more information, visit [www.rohde-schwarz.com/catalog/RTM3000](http://www.rohde-schwarz.com/catalog/RTM3000)



## Power highlights

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

## 8 instruments in one

Oscilloscope	standard
Logic analyzer (16-channel MSO)	R&S®RTA-B1MSO option, includes cabling, lead sets and grabbers
Protocol analyzer	options for different serial buses
Spectrum analyzer	R&S®RTA-K18 option with DDC and spectrogram
Integrated digital voltmeter	standard
Trigger counter	standard
Waveform generator (25 MHz)	R&S®RTA-B6 option
Pattern generator (4-bit)	R&S®RTA-B6 option

## Ordering information

### Step 1: Choose your oscilloscope model

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

**Included:** All models include R&S®RT-ZP05S passive probes for each channel, 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

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 I<sup>2</sup>C/SPI  
 R&S®RTM-K2 UART/RS-232/422/485  
 R&S®RTM-K3 CAN/LIN  
 R&S®RTM-K5 I<sup>2</sup>S 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

Application bundle  
 R&S®RTM-PK1 (includes R&S®RTM-K1, -K2, -K3, -K5, -K6, -K7, -K15, -K18, -K31, -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®ZZA-RTM3K rackmount kit

### Step 4: Choose your probes (more available)

Power rail probe	Type
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
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#### Active differential probes

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

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

100 MHz, 1000:1/100:1, 40 MΩ, 6000 V (pk), 1000 V CATIII, Rohde & Schwarz probe interface	R&S®RT-ZHD60
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