R&S®RTM3000 Oscilloscopes

Power of 10



Key specifications Bandwidth 100 MHz, 200 MHz, 350 MHz, 500 MHz, 1 GH₂ 2 or 4 analog channels Channels + 16 digital channels (with MSO option) **ADC** 10-bit Max. sampling 5 Gsample/s (interleaved), 2.5 Gsample/s (all channels) 40 Msample, 80 Msample (interleaved), Memory depth 400 Msample in history mode (with R&S®RTM-K15 option) 10.1" capacitive touch, 1280 x 800 resolution Display 10 seconds Boot time LAN, USB host/device, fast display over Connectivity Ethernet Upgradable bandwidth, protocol trigger and decode,

waveform generator

standard 3-year

MSO, pattern generator and arbitrary

probe power and auto configuration

R&D serial bus

debugging

Education

The perfect choice for

debugging

Probe interface

Warranty

Manufacturing

testing and repair

R&D power integrity

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 |







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

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 | | |
|--|--|--|
| standard for two-channel and four- channel models | | |
| R&S®RTM-B222 for R&S®RTM3002 R&S®RTM-B242 for R&S®RTM3004 | | |
| R&S®RTM-B223 for R&S®RTM3002 R&S®RTM-B243 for R&S®RTM3004 | | |
| R&S°RTM-B225 for R&S°RTM3002 R&S°RTM-B245 for R&S°RTM3004 | | |
| 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 ² C/SPI R&S°RTM-K2 UART/RS-232/422/485 R&S°RTM-K3 CAN/LIN R&S°RTM-K5 I ² 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 s 400 MHz | signal upgrade for non-MSO models, | |
| R&S®RTM-B6 arbitrary waveform generator | | |
| Accessories | | |
| R&S®ZZA-RTM3K rackmount kit | | |

| 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 |

| Step 4: Choose your probes (more available) | | | | |
|--|--------------|--|--|--|
| Power rail probe | Туре | | | |
| 2.0 GHz, 1:1, 50 k Ω , ±0.85 V, ±60 V offset, Rohde & Schwarz probe interface | R&S°RT-ZPR20 | | | |
| Active single-ended probes | | | | |
| 1.0 GHz, 1 M Ω , 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 M Ω , 6000 V (pk), 1000 V CATIII, Rohde & Schwarz probe interface | R&S*RT-ZHD60 | | | |