



R&S®MXO 4 SERIES OSCILLOSCOPE

Next generation oscilloscope for accelerated insight



The perfect choice for

Hardware debugging
Serial bus analysis

Power analysis

EMI debugging

Power integrity

Key specifications

Bandwidth	200 MHz, 350 MHz, 500 MHz, 1 GHz (on 4 channels) 1.5 GHz (interleaved on 2 channels)
Channels	4 analog 16 digital (standard) (with logic probes)
Max. sample rate	5 Gsample/s (interleaved) 2.5 Gsample/s (all channels)
Memory depth	400 Mpoints (standard) 800 Mpoints (option)
Vertical resolutions	12-bit ADC (all settings) 18-bit HD mode
Display	13.3" Full HD display with capacitive touch
Operating system	Linux (closed)
Warranty	3 years

The R&S®MXO 4 Series is the first of a new generation of oscilloscopes that excel in both performance and value. The instruments deliver a once-in-a-decade engineering breakthrough for accelerated insight.

- ▶ 200 MHz to 1.5 GHz bandwidth
- ▶ Up to 5 Gsample/s sample rate
- ▶ Standard memory of 400 Mpoints per channel
- ▶ 12-bit ADC at all sample rates
- ▶ 18-bit architecture with HD mode
- ▶ Precise digital trigger

Your benefit	Features
See more of your signals, faster	<ul style="list-style-type: none"> ▶ World's fastest acquisition rate of over 4.5 million waveforms/s shows infrequent anomalies instantly ▶ Industry's lowest trigger rearm time of <21 ns
See your signals accurately	<ul style="list-style-type: none"> ▶ 12-bit ADC vertical resolution at all sample rates without tradeoffs ▶ 18-bit architecture with HD mode ▶ Minimal noise of 104 μV at 1 GHz with 1 mV/div sensitivity ▶ \pm5 V offset range with 500 μV/div sensitivity
Capture more time	<ul style="list-style-type: none"> ▶ Standard memory of 400 Mpoints per channel with option for 800 Mpoints ▶ History and segmented memory to capture up to 1 million acquisitions
Isolate events with more precision	<ul style="list-style-type: none"> ▶ Industry's most sensitive trigger: 1/1000 vertical division ▶ Best-in-class trigger jitter of just 1 ps ▶ Adjustable digital trigger filters with user-selectable hysteresis



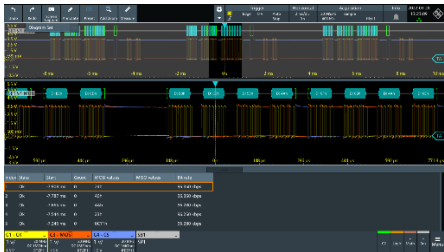
For more information, visit
www.rohde-schwarz.com/product/MXO4

Your go-to tool



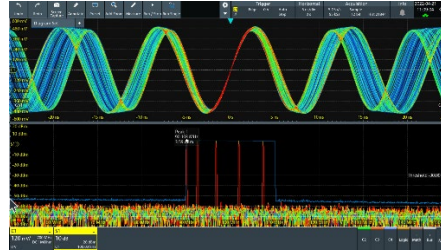
- ▶ Wide range of analysis functions accelerated by hardware for real-time performance, including math and measurements
- ▶ 16 digital channels activated with R&S®MXO4-B1 probes that can be used simultaneously with all analog channels
- ▶ The R&S®MXO4-B6 option adds a dual-channel 100 MHz arbitrary waveform generator with a wide range of waveshapes
- ▶ Frequency response and impedance analysis are available with the R&S®MXO4-K36 option, making the scope versatile for power analysis

Serial bus analysis



- ▶ Innovative dual-path protocol analysis ensures protocol packets decode and trigger correctly regardless of sample rate settings for the waveform acquisitions
- ▶ In addition to very high segmented memory depth, the R&S®MXO 4 enables very long time captures of protocol events to help monitor and understand system behavior
- ▶ Search functionality helps find events of interest in the captured bus activity based on trigger or protocol content

Spectrum analysis



- ▶ Hardware accelerated processing boasts an industry-leading spectrum acquisition rate of 45 000 FFT/s – ideal for capturing spurious and random spectrum events
- ▶ RF and time domain views with independent control allow intuitive setup and remain time-correlated
- ▶ Outstanding RF spectrum performance with peak list and max/min hold traces, making the R&S®MXO 4 perfect for EMI debugging

Probe choices

Rohde & Schwarz offers a wide variety of probe choices for your applications including:

- ▶ Active single ended and differential probes
- ▶ High voltage and current probes
- ▶ Power rail probes
- ▶ Logic probes
- ▶ Near field probes



Visit our probe portfolio to find out more

Ordering information

Step 1: Choose your oscilloscope model

Description	Item
200 MHz, 4-channel oscilloscope	R&S®MXO44

Accessories included: 700 MHz passive probe (10:1) per channel, accessories bag, quick start guide, power cord

Languages supported: English, German, French, Spanish, Italian, Portuguese, Czech, Polish, Russian, simplified and traditional Chinese, Korean and Japanese

Step 2: Choose your bandwidth option (software upgradeable)

Upgrade of R&S®MXO44 to 350 MHz bandwidth	R&S®MXO4-B243
Upgrade of R&S®MXO44 to 500 MHz bandwidth	R&S®MXO4-B245
Upgrade of R&S®MXO44 to 1 GHz bandwidth	R&S®MXO4-B2410
Upgrade of R&S®MXO44 to 1.5 GHz bandwidth	R&S®MXO4-B2415

Step 3: Choose your hardware option

Mixed signal option (MSO) with 16 digital channels	R&S®MXO4-B1
Arbitrary waveform generator, 100 MHz, 2 channels	R&S®MXO4-B6
800 Mpoints memory option	R&S®MXO4-B108

Step 4: Choose your software option

Low speed serial triggering and decode	R&S®MXO4-K510
Automotive serial triggering and decode	R&S®MXO4-K520
MIPI low speed serial decode	R&S®MXO4-K550
Automotive Ethernet decode	R&S®MXO4-K560
Frequency response analysis	R&S®MXO4-K36

Step 5: Choose your accessories

Front cover	R&S®MXO4-Z1
Soft bag	R&S®MXO4-Z3
Transit case	R&S®MXO4-Z4
Rackmount kit	R&S®ZZA-MXO4

Warranty

Base unit	3 years
All other items	1 year

Additional service options available for extended warranty coverage

Rohde & Schwarz GmbH & Co. KG (www.rohde-schwarz.com)

Rohde & Schwarz customer support (www.rohde-schwarz.com/support) Rohde & Schwarz training (www.training.rohde-schwarz.com)

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