Make ideas real



### R&S®MXO 4 SERIES OSCILLOSCOPE

## Next generation oscilloscope for accelerated insight

The perfect choice for



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

Hardware debuggin

Serial bus analysis

Power analysis

EMI debugging

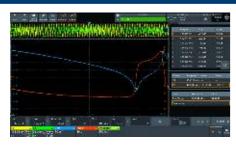
Power integrity

Key specifications	3
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

Your benefit	Features
See more of your signals, faster	➤ 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> <li>12-bit ADC vertical resolution at all sample rates without tradeoffs</li> <li>18-bit architecture with HD mode</li> <li>Minimal noise of 104 µV at 1 GHz with 1 mV/div sensitivity</li> <li>±5 V offset range with 500 µV/div sensitivity</li> </ul>
Capture more time	<ul> <li>Standard memory of 400 Mpoints per channel with option for 800 Mpoints</li> <li>History and segmented memory to capture up to 1 million acquisitions</li> </ul>
Isolate events with more precision	<ul> <li>Industry's most sensitive trigger: 1/1000 vertical division</li> <li>Best-in-class trigger jitter of just 1 ps</li> <li>Adjustable digital trigger filters with user-selectable hysteresis</li> </ul>

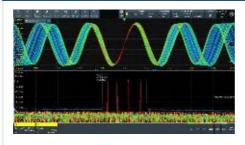


#### Your go-to tool



- 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®MX04-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®MX04-K36 option, making the scope versatile for power analysis

#### 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

#### 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

#### **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



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Trade names are trademarks of the owners | R&S®MXO 4 Series oscilloscope | Data without tolerance limits is not binding
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# Ordering information Step 1: Choose your oscilloscope model Description | Item 200 MHz, 4-channel oscilloscope | R&S®MX044

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®MX044 to 350 MHz bandwidth	R&S®MX04-B243	
Upgrade of R&S®MX044 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®MX04-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®MX04-B108

Step 4: Choose your software option	
Low speed serial triggering and decode	R&S®MX04-K510
Automotive serial triggering and decode	R&S®MX04-K520
Aerospace and defense serial triggering and decode	R&S®MX04-K530
Frequency response analysis	R&S®MX04-K36

Step 5: Choose your accessories	
Front cover	R&S®MX04-Z1
Soft bag	R&S®MX04-Z3
Transit case	R&S®MXO4-Z4
Rackmount kit	R&S®ZZA-MX04

Warranty	
Base unit	3 years
All other items	1 year
Additional service options available for extended warranty coverage	