ROHDE&SCHWARZ
Make ideas real

SIGNAL AND POWER INTEGRITY SOFTWARE BUNDLE

For MXO oscilloscopes

Flyer | Version 01.00



SIGNAL AND POWER INTEGRITY SOFTWARE BUNDLE FOR MXO OSCILLOSCOPES

Do you need to verify signal quality, power-rail stability and system behavior under real operating conditions?

USE THE BUNDLE TO PERFORM:

- **Jitter measurement:** Measure timing variations such as random jitter, deterministic jitter, cycle-to-cycle jitter, period jitter and total jitter
- **Eye diagram analysis:** Evaluate signal quality, including eye height, eye width, noise margin, timing margin and jitter
- **Power rail ripple and noise:** Measure low-level AC noise on DC supplies, including switching ripple, broadband noise and high-frequency spikes
- **Transient response:** Capture how a rail responds to load steps, processor activity, startup, shutdown, sleep/wake transitions and fault events
- **Voltage droop and overshoot:** Identify supply dips or peaks that can cause logic errors, resets, timing issues or reliability problems
- **Startup and sequencing:** Verify that multiple rails turn on/off in the correct order and meet timing requirements
- **Switching regulator behavior:** Analyze switching frequency, duty cycle, inductor current, control-loop response, ringing and stability
- **Jitter and data-error correlation:** Correlate rail noise with clock jitter, eye closure, bit errors or protocol failures
- **EMI debugging:** Identify high-frequency noise sources that may contribute to radiated or conducted emissions

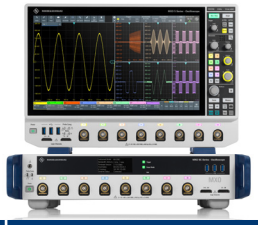
WHAT IS INCLUDED?

BASIC JITTER ANALYSIS (R&S®MXOx-K12)	Analyze clock and data jitter with automated measurements. Quantify timing variation and understand jitter behavior in digital designs.
EYE ANALYSIS (R&S®MXOx-K136) Only supported on the MXO 5/MXO 5C	Use eye analysis for a quick and easy assessment of overall signal integrity, including eye opening, noise margin, timing margin and mask violations.
FREQUENCY RESPONSE ANALYSIS (BODE PLOT; R&S®MXOx-K36)	Use the integrated waveform generator to measure gain and phase across frequency. Characterize control-loop response (CLR), power supply rejection ratio (PSRR), filters, resonant networks and amplifier behavior with clear Bode plot results.
IMPEDANCE ANALYSIS (R&S®MXOx-K337)	Measure impedance over frequency to identify PDN resonances, validate decoupling strategies and characterize signal or power paths.
ARBITRARY WAVEFORM GENERATOR (R&S®MXOx-B6)	Generate stimulus directly from the oscilloscope with a fully integrated arbitrary waveform generator. Create standard or custom waveforms for signal-path validation, impedance analysis, control-loop testing and functional checks.
LOW SPEED SERIAL BUSES (R&S®MXOx-K510)	Trigger on and decode low speed serial buses such as I^2C, SPI, RS-232, RS-422, RS-485, UART, Quad-SPI, OctoSPI, NRZ, Manchester and 8b/10b. Correlate bus events with physical-layer signal quality.
MIPI LOW SPEED SERIAL PROTOCOLS (R&S®MXOx-K550)	Trigger on and decode MIPI low speed control buses including SPMI, RFFE and I^3C. Correlate protocol activity with analog and power waveforms directly on the oscilloscope.
BUS ANALYSIS (R&S®MXOx-K500)	Perform in-depth analysis of decoded bus data using timing, measurement and search tools.
MEMORY UPGRADE (R&S®MXOx-B105/ -B108/-B110)	Extend acquisition memory from the standard 125 Mpoints (MXO 3), 400 Mpoints (MXO 4) or 500 Mpoints (MXO 5/MXO 5C) to 500 Mpoints, 800 Mpoints or 1 Gpoints respectively. Capture longer time windows without compromising sample rate.

Key specifications







	MXO 3	MXO 4	MXO 5/MXO 5C
Number of channels	4/8	4	4/8
Bandwidth [1]	100/200/350/500 MHz/1 GHz	200/350/500 MHz/1/1.5 GHz	▶ 4 channels: 350 MHz/500 MHz/1 GHz/2 GHz ▶ 8 channels: 100/200/350/500 MHz/1 GHz/2 GHz
Sampling rate per channel (in Gsample/s)	▶ 4-channel models: 5 on 2 channels; 2.5 on 4 channels ▶ 8-channel models: 5 on 4 channels; 2.5 on 8 channels	5 on 2 channels; 2.5 on 4 channels	▶ 4-channel models: 5 on all channels ▶ 8-channel models: 5 on 4 channels; 2.5 on 8 channels
Memory depth (with memory extension option)	500 Mpoints	800 Mpoints	1 Gpoints
Display size	11.6"	13.3"	for MXO 5 only: 15.6"
Generator	1 × 50 MHz	2 × 100 MHz	2 × 100 MHz

Why the MXO series for signal and power integrity testing?

- **Fast:** World's fastest update rate of 4.5 million acquisitions/s enables a signal capture rate of up to 99 %, helping capture events that other oscilloscopes may miss
- **Precise:** High resolution, low noise and digital triggering provide accurate signal representation
- **Superior spectrum analysis:** Fastest spectrum (50 000 FFT/s) with spectral control independent of the time domain waveforms and up to four simultaneous spectrum displays
- **Powerful oscilloscope capabilities:** Benefit from powerful oscilloscope capabilities such as XY mode, mask testing, digital voltmeter, math equations and zone triggering (on analog, math and spectrum signals) to speed up analysis and testing
- **Complete signal and power integrity portfolio:** Rohde&Schwarz offers a complete portfolio for signal and power integrity testing with oscilloscopes, including eight-channel oscilloscopes, power rail probes, EMC near-field probes and more

Why the MXO series application bundle?

- **Regular firmware updates:** Software enhancements for standard MXO features and MXO options are released three to four times per year. Users can benefit from these enhancements through free firmware upgrades
- **Future-proof:** Permanent, time-unlimited licenses are offered with the application bundles. It is a one-time investment, and future enhancements for these options are simply provided through firmware updates. There are no subscription or maintenance fees
- **High value:** Get the software options at a significantly lower cost than buying them individually

Ordering information

Designation	Type	Order No.
MXO 3 signal integrity/power integrity application bundle	R&S®MXO3-SIPI	1335.3470.02
MXO 4 signal integrity/power integrity application bundle	R&S®MXO4-SIPI	1335.6256.02
MXO 5 signal integrity/power integrity application bundle	R&S®MXO5-SIPI	1801.9228.02
MXO 5C signal integrity/power integrity application bundle	R&S®MXO5C-SIPI	1801.9257.02

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PD 3673.4600.32 | Version 01.00 | October 2026 (sk)
Signal and power integrity software bundle | For MXO oscilloscopes
Data without tolerance limits is not binding | Subject to change
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