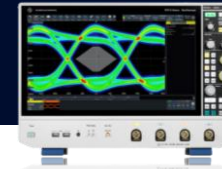




R&S® RT06 OSCILLOSCOPE

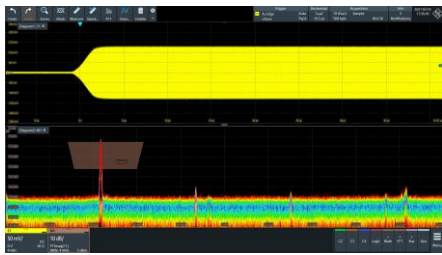
versus Keysight MXR Series



Offering bandwidths from 600 MHz to 6 GHz, R&S®RT06 oscilloscopes excel at both time domain and frequency domain testing. Thanks to excellent signal fidelity, responsiveness of 1 million waveforms/s and up to 16-bit vertical resolution, you can measure quickly with confidence. The capacitive touchscreen with R&S®SmartGrid makes the R&S®RT06 easy and intuitive to use.

Your benefit	Features
Quick and detailed insight	Excellent update rate, memory depth, digital triggering, sample rate, MSO, integrated hardware-based spectrum analysis, touchscreen-optimized GUI
Debugging across multiple domains	Unique time domain and frequency domain capability; industry-first ability to trigger in the time or frequency domain and see both domains time-correlated
Deep toolset for signal analysis	Over 90 measurement functions (amplitude and time measurements, jitter, eye, histogram, spectral measurements); statistics, histograms, trend and track functions; the measurement results can also be used in math functions

Fast Fourier transform (FFT) functionality



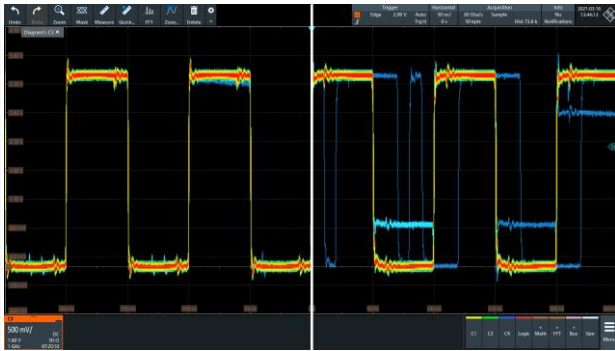
R&S®RT06 provides multichannel FFTs that enable spectrum analysis on every channel with individual settings (center frequency, frequency span, resolution bandwidth) and > 1 000 000 waveforms/s update rate. Overlapping FFT and zone trigger in frequency domain help to identify challenging EMI problems: Detecting and analyzing sporadic emissions.



For more information, visit
www.rohde-schwarz.com/product/RT06

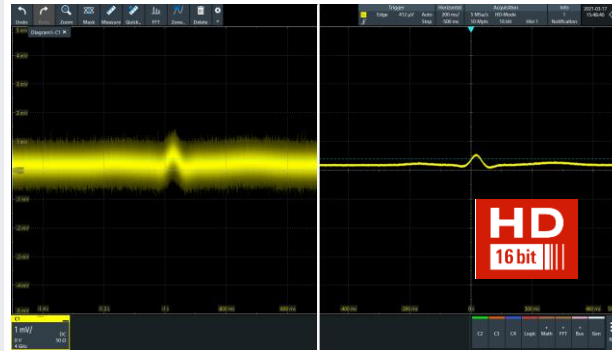
Parameter	R&S®RT06	Keysight MXR series
Acquisition system		
Bandwidth (GHz)	0.6, 1, 2, 3, 4, 6 (upgradable)	0.5, 1, 2, 2.5, 4, 6 (upgradable)
Max. vertical resolution	16-bit	16-bit
Max. sampling rate	10 Gsa/s on 4 channels 20 Gsa/s on 2 channels (4 & 6 GHz models only)	16 GSA/s
Max. memory depth	1 Gpts/channel (max 2 Gpts on 2 channels)	400 Mpts/channel
Waveform update rate	> 1 000 000 waveforms/s	> 200 000 waveforms/s
Hardware input sensitivity	1 mV/div – 1 V/div @50 Ω	2 mV/div – 1 V/div @50 Ω
Segmented memory / History mode	> 100 000 acquisitions	Up to 5205 / 1024 acquisitions (segmented memory / history mode)
Frequency domain analysis	Overlap FFT, frequency mask, spectrogram & peak list (optional), independent settings (center frequency, frequency span, RBW) for every channel, frequency span 1 Hz – half of the sampling rate, > 1 000 waveforms/s	Start and stop frequency, span and center frequency, resolution bandwidth, peak detect
Signal integrity		
Noise 1 mV/div, 20 MHz, 50 Ω	14 μV	43 μV
Overall system ENOB	Up to 9.4	Up to 9.0
DC gain accuracy	Up to ±1.5%	±2% full scale
Trigger sensitivity	0.0001 div (for all bandwidths and all vertical scales)	< 0.15 div @50 Ω, < 5 mV/div
Hardware options		
Arbitrary function generator	2 channels, 100 MHz	1 channel, 50 MHz
Mixed signal capabilities (MSO)	400 MHz, 16 ch, 5 GSA/s, 200 Mpts/ch	300 MHz, 16 ch, 8 GSA/s, 250 Mpts/ch
Analysis functions		
Trigger types	19, e.g. Clock Data Recovery, Zone Trigger in frequency-domain or in spectrum	17
Math functions	41, incl. formula editor	31
Serial bus decode & compliance	Complete	Complete

Quickly find signal faults with 1 million waveforms/s



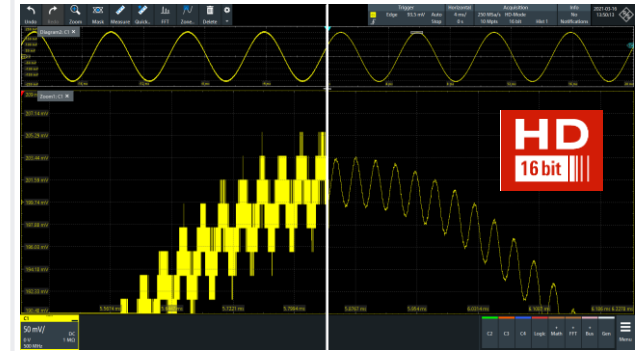
R&S®RTO6 oscilloscopes acquire and display up to 1 million waveforms/s in real-time. To make this possible, Rohde & Schwarz developed an ASIC with optimized signal processing. R&S®RTO6 oscilloscopes enable you to quickly and reliably detect sporadic signal faults. A high acquisition rate is even available when histograms, masks or cursor measurements are active.

Trigger on any signal detail you can see



The unique digital trigger system from Rohde & Schwarz uses the sampling points of the A/D converter in the acquisition path so that the trigger system's input data is identical to the displayed signal. The trigger system runs in HD mode with up to 16-bit vertical resolution. This results in a very high trigger sensitivity. You can reliably isolate even the smallest signal details.

Up to 16-bit vertical resolution



The low-noise frontend and 10 GHz single-core A/D converter are the foundation for the extraordinarily high measurement accuracy and dynamic range of the R&S®RTO6 oscilloscopes. The high definition mode (HD mode) activates a configurable hardware lowpass filter, increasing the vertical resolution to up to 16 bit and 9.4 ENOB. Since filtering reduces quantizing noise, signal details become visible.

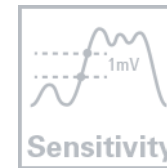
Advantage factors of R&S®RTO6 versus Keysight MXR series



5 x
faster capture rate



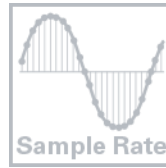
2.5 x
more memory



2 x
better input sensitivity



3 x
less noise



25 %
higher sample rate