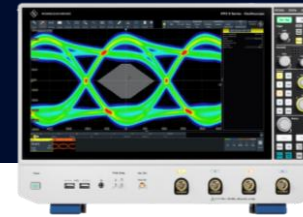




# R&S® RT06 OSCILLOSCOPE

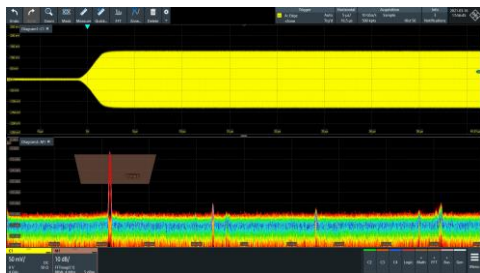
## versus Lecroy WavePro HD



Offering bandwidths from 600 MHz to 6 GHz, R&S®RT06 oscilloscopes excel at both time domain and frequency domain testing. Excellent signal fidelity, responsiveness of 1 million waveforms/s and up to 16-bit vertical resolution allow you to measure quickly and 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 insights	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) function



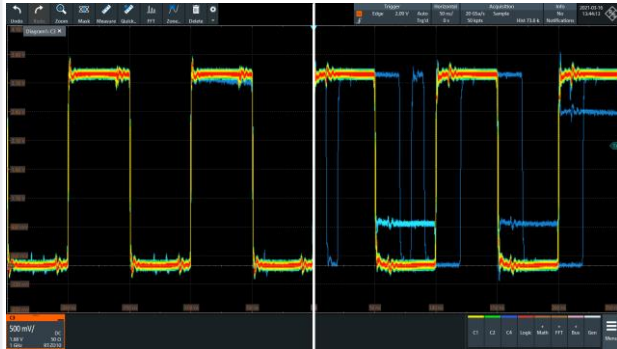
The R&S®RT06 provides multichannel FFTs that enable spectrum analysis on every channel with individual settings (center frequency, frequency span, resolution bandwidth) and an update rate of > 1 000 000 waveforms/s. The overlapping FFT and zone trigger in the frequency domain help to detect and analyze challenging EMI problems such as sporadic emissions.



For more information, visit  
[www.rohde-schwarz.com/product/RT06](http://www.rohde-schwarz.com/product/RT06)

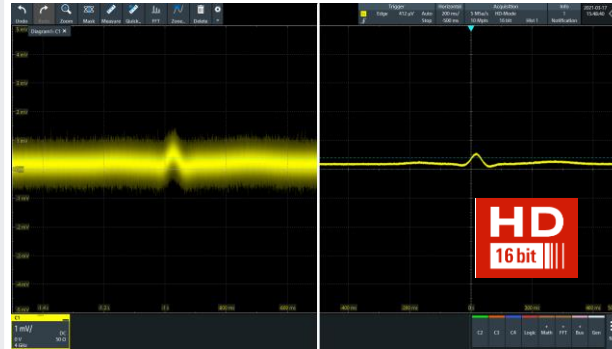
Parameter	R&S®RT06	Lecroy WavePro HD
Bandwidth (GHz)	0.6, 1, 2, 3, 4, 6 (upgradeable)	2.5, 4 on all channels 6, 8 on 2 channels
Analog input channels	4	4
Digital input channels (MSO)	16 (optional, retrofittable)	16 (optional, not retrofittable)
Max. vertical resolution	16-bit	15-bit
Overall system ENOB	Up to 9.4	Up to 7.8
Max. sampling rate	10 Gsample/s on 4 channels 20 Gsample/s on 2 channels (4 GHz and 6 GHz models only)	10 Gsample/s on 4 channels 20 Gsample/s on 2 channels
Memory depth	All in run continuous mode: 200 Mpts/channel (standard) 1 Gpts/channel (optional) Max. 2 Gpts on 2 channels (optional)	50 Mpts/channel (standard) Max. 500 Mpts/channel in run continuous mode (optional) Max. 5 Gpts on 2 channels in single shot mode (optional)
Waveform update rate	> 1 000 000 waveforms/s	650 000 waveforms/s
Noise (1 mV/div, 50 Ω)	14 µV @ 20 MHz bandwidth filter 220 µV @ 4 GHz instrument bandwidth	228 µV @ 4 GHz instrument bandwidth
Trigger bandwidth	Full instrument bandwidth, independent of trigger event	Edge: 8 GHz Other: 2 GHz
Trigger sensitivity (50 Ω)	0.0001 div (for all bandwidths and all vertical scales), adjustable hysteresis (0 div to 5 div)	2.25 div @ < 8 GHz 1.25 div @ < 4.5 GHz 0.75 div @ < 1 GHz
Trigger jitter	< 1 ps	< 2.5 ps
Zone trigger	Time and frequency domain	Not available
Arbitrary function generator	2 channels, 100 MHz	Not available
High speed functionalities	Deembedding, clock data recovery, digital downconversion	Not available
Display	15.6 inch touchscreen with 1920 × 1080 Full HD resolution	15.6 inch touchscreen with 1920 × 1080 Full HD resolution

## Quickly find signal faults with 1 million waveforms/s



R&S®RT06 oscilloscopes display up to 1 million waveforms/s. Rohde & Schwarz achieved this by developing an ASIC with optimized signal processing. R&S®RT06 oscilloscopes enable you to quickly and reliably detect sporadic signal faults. A high acquisition rate is available even when histograms, masks or cursor measurements are active.

## Trigger on any signal detail you see



The unique digital trigger system from Rohde & Schwarz uses the sampling points of the A/D converter in the acquisition path so the trigger system's input data is identical to the displayed signal. The trigger system runs in high definition (HD) mode with up to 16-bit vertical resolution. This results in 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®RT06 oscilloscopes. The 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.

## Advantages of the R&S®RT06 over the Lecroy WavePro HD



**1.5 x**  
faster capture rate



**4 x**  
more memory

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