



# R&S® RTE1000 DIGITAL OSCILLOSCOPE

## Truly uncompromised in performance



The perfect choice for

Designing and debugging embedded systems	Signal validation
EMI debugging during daily development	Power integrity analysis

Key specifications	
Bandwidth	200 MHz, 300 MHz, 500 MHz, 1 GHz, 1.5 GHz, 2 GHz
Channels	2/4
Max. sample rate	5 Gsample/s
Max. memory	200 Msample (standard)
Mixed signal option	16 channels, 5 Gsample/s
Acquisition rate	> 1 000 000 waveforms/s
Vertical resolution	up to 16 bits (standard)
Mixed signal option	16 channels, 400 MHz, 5 Gsample/s, 100 Msample/channel

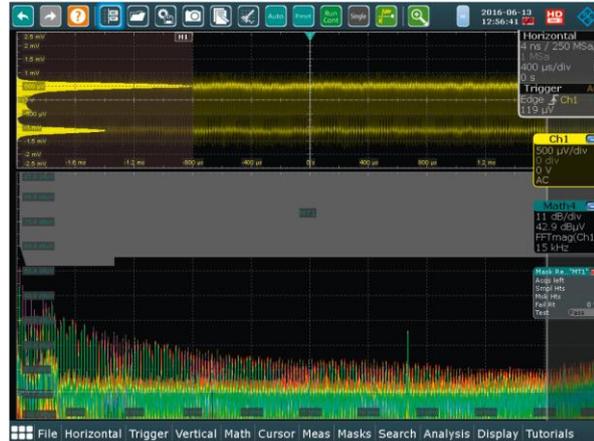
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More reliable measurements, more tools and fast results, more fun to use – that’s the R&S® RTE oscilloscope. From embedded design development to power electronics analysis to general debugging, the R&S® RTE offers quick solutions for everyday T&M tasks.

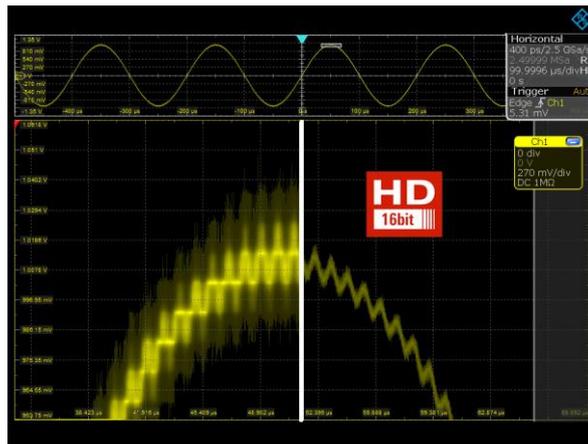
Your benefit	Features
No trade-offs	<ul style="list-style-type: none"> <li>▶ Longest signal sequences (200 Msample memory depth) at highest resolution (5 Gsample/s sampling rate)</li> <li>▶ Find signal faults quickly: more than 1 000 000 waveforms/s</li> <li>▶ Most precise results: 16-bit vertical resolution in high definition mode</li> </ul>
High-resolution 10.4" touchscreen	<ul style="list-style-type: none"> <li>▶ Drag &amp; drop signals and measurement results</li> <li>▶ Results in only two clicks thanks to the powerful toolbar</li> <li>▶ Convenient tools such as QuickMeas, fingertip zoom and undo/redo</li> </ul>
Multichannel spectrum analysis	<ul style="list-style-type: none"> <li>▶ Analysis of up to four signals in parallel</li> <li>▶ Correlation of time and frequency signals</li> <li>▶ Spectrogram: display changes in power and frequency over time</li> <li>▶ Outstanding RF performance: high dynamic range and low inherent noise</li> </ul>



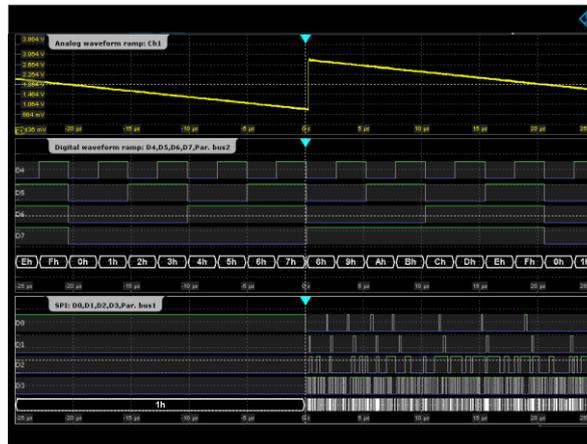
You can drag & drop waveforms and result windows on the screen. The SmartGrid function helps you flexibly arrange multiple diagrams on the screen.



R&S®RTE oscilloscopes come with built-in spectrum analysis for up to four signals in parallel. Results can be correlated in the time and frequency domain. Analysis functions such as spectrogram (with R&S®RTE-K18 option), mask test and peak list are available.



The high definition mode (HD mode) increases the vertical resolution of the R&S®RTE to up to 16 bit. This results in sharper waveforms, showing signal details that would otherwise be masked by noise.



With the R&S®RTE-B1 option, every R&S®RTE can be turned into a mixed signal oscilloscope with 16 digital channels. This example shows the ramp signal of a 4-bit ADC with analog and digital channels correlated to an SPI bus that controls the ADC.

## Popular options

Hardware options (plug-in)	Type
Mixed signal option, 400 MHz, 16 digital channels	R&S®RTE-B1
SSD hard disk	R&S®RTE-B18
Serial triggering and decoding	
Trigger and Decode Bundle	R&S®RTE-TDBNDL
I <sup>2</sup> C/SPI serial decoding	R&S®RTE-K1
UART/RS-232/RS-422/RS-485 serial decoding	R&S®RTE-K2
CAN/LIN serial triggering and decoding	R&S®RTE-K3
Analysis	
Spectrum analysis	R&S®RTE-K18
Power analysis	R&S®RTE-K31

## Broad range of probes

Active		Multifunctional	
Single-ended	Differential	High-voltage	Current
Passive			EMC near-field
Standard	Special		

Rohde & Schwarz offers a broad range of oscilloscope probes for different applications. For more information, see the product brochure: Digital oscilloscopes from Rohde & Schwarz, Probes and accessories (PD 3606.8866.12)