

ROHDE & SCHWARZ

Make ideas real



# 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



### Truly uncompromised in performance

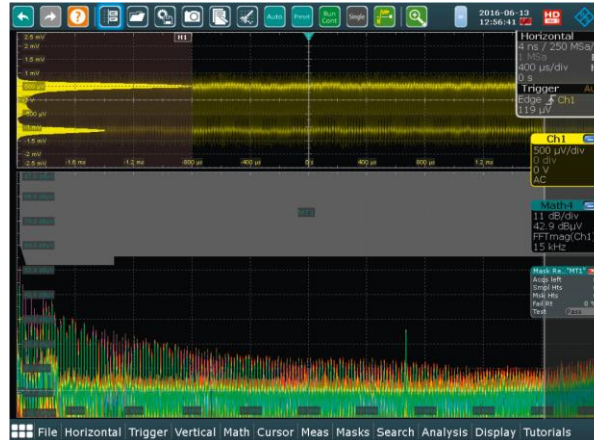
More reliable measurements, more tools and fast results, more fun to use – that's the R&S® RTE oscilloscope. From embedded design development to power electronics analysis to general debugging, the R&S® RTE offers quick solutions for everyday T&M tasks.

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

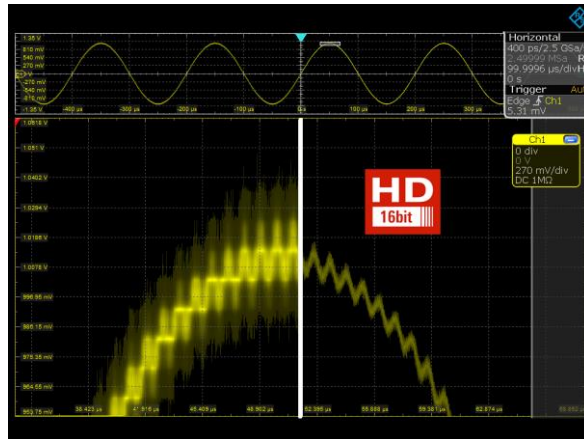
Your benefit	Features
No trade-offs	<ul style="list-style-type: none"><li>▶ Longest signal sequences (200 Msample memory depth) at highest resolution (5 Gsample/s sampling rate)</li><li>▶ Find signal faults quickly: more than 1 000 000 waveforms/s</li><li>▶ Most precise results: 16-bit vertical resolution 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>



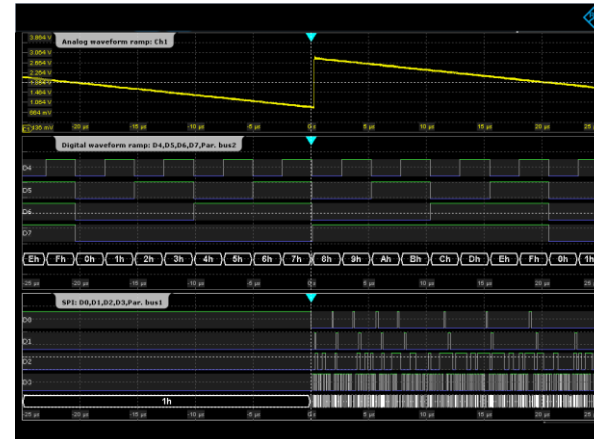
You can drag & drop waveforms and result windows on the screen. The SmartGrid function helps you flexibly arrange multiple diagrams on the screen.



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)