### **ROHDE&SCHWARZ**

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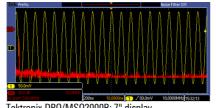
# R&S®RTB2000

# versus Tektronix DPO/MSO2000B

# The R&S\*RTB2000 outperforms the Tektronix DPO/MSO2000B Series in major parameters with the power of 10



R&S $^{\circ}$ RTB2000: 10.1" display, 1280  $\times$  800 pixel resolution



Tektronix DPO/MSO2000B: 7" display, 480 × 234 pixel resolution

	Your benefit	Features
	10-bit ADC: four times more vertical resolution	The proprietary Rohde & Schwarz 10-bit ADC used in the R&S®RTB2000 allow four times more vertical resolution compared to the standard 8-bit ADC in the Tektronix DPO2000B. Finer voltage measurements become important as the voltage levels decrease.
	10 Msample memory: capture longer periods	The responsive 10 Msample memory per channel with quick zoom functions allows 10 times more acquisition time than the Tektronix DP02000B at the same sample rate
	10.1" high-resolution capacitive touchscreen with gesture support	The capacitive touchscreen of the R&S®RTB2000 offers twice the display area and about nine times more resolution than the display of the Tektronix DP02000B. Gesture support enables fast setting times and short learning time.





Parameter	R&S®RTB2000	Tektronix DPO/MSO2000B
Acquisition system		
Channels	4/2 for all models	4/2 for all models
Bandwidth	70/100/200/300 MHz (upgradeable)	70/100/200 MHz
ADC resolution	10-bit	8-bit
Max. resolution	16-bit with high resolution	8-bit
Max. real-time sampling rate	2.5 Gsample/s	1 Gsample/s
Standard memory depth	10 Msample per channel (all channels) 20 Msample (interleaved)	1 Msample per channel (all channels)
Segmented memory depth/history mode	Optional – 160 Msample	-
Waveform update rate	50 000 waveforms/s standard 300 000 waveforms/s in fast segmented memory mode	5000 waveforms/s standard
MSO sampling rate / memory depth	<ul><li>1.25 Gsample/s, 16 digital channels /</li><li>10 Msample, upgradeable</li></ul>	0.5 Gsample/s, 16 digital channels / 1 Msample, on MSO models
Hardware input sensitivity	1 mV	2 mV
X-in-1 oscilloscope		
Serial decode options	I <sup>2</sup> C, SPI, UART/RS-232/422/485, CAN, LIN (analog and digital channels)	I <sup>2</sup> C, SPI, UART/RS-232/422/485, CAN, LIN
Generator option	Function and arbitrary, 4-bit pattern	-
Frequency response analysis (Bode plot)	yes	-
Multifunction	DVM, counter	-
Form factor		
Display	10.1" (1280 × 800) pixel resolution	7" (480 $\times$ 234) pixel resolution
Touchscreen	yes – capacitive	-
Grid annotation	yes	-
Boot time	~ 10 s	~ 56 s
Dimensions	390 mm × 220 × 152 mm	377 mm × 180 mm × 134 mm
Weight	2.5 kg	3.6 kg

## Innovative user interface, quick and easy to use



The R&S®RTB2000 user interface offers features not available on the Tektronix DPO2000B.

- ► Touchscreen with gesture support and on-screen annotation
- Mouse support
- ► Grid annotations for easy determination of vertical and horizontal values
- ► Pull up/down menu for optimized waveform viewing
- ▶ Quick measure button to immediately display nine automated measurements on the signal



Configurable toolbar (including undo and redo) for fast access to functions and quick finger annotation, allowing fast operation and documentation

#### **Education mode**

The R&S®RTB2000 gives accurate and fast results. With its modern multifunction capabilities, including a built-in generator, it is the perfect tool for education. For classroom training, the education mode deactivates comfort functions such as autoset, quick measure and automatic measurements.

#### More investment protection

When it comes to investment protection, the R&S®RTB2000 is class-leading. Buy only what you need today and upgrade later as your needs grow. Upgrades after purchasing are available for:

- ► Bandwidth up to 300 MHz
- ► Digital channels (mixed signal option)
- ► Serial triggering and decoding of I<sup>2</sup>C, SPI, UART/RS-232/422/485, CAN/LIN
- ► History mode with up to 160 Msample memory
- ► Function, arbitrary and pattern generator

## Advantages of R&S®RTB2000 over Tektronix DPO/MS02000B



4 X
More ADC resolution



20 X More memory



1.4 x

More display area



2.5 X
More sample rate



2 X Lower sensitivity



5.6 X
Faster boot-up

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