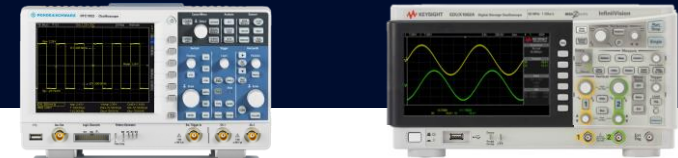# ROHDE&SCHWARZ
Make ideas real

R&S®RTC1000
versus Keysight 1000X

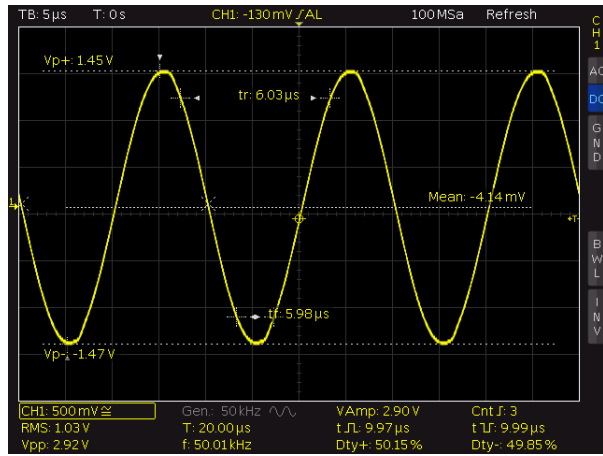## High sensitivity, multifunctional and a great price

From embedded developers to service technicians and educators – the wide range of functions address a broad group of users. State-of-the-art, high-performance technology in an extremely silent design meets the high requirements of today's customers. These digital oscilloscopes include a wide range of upgrade options, providing true investment protection for the future.

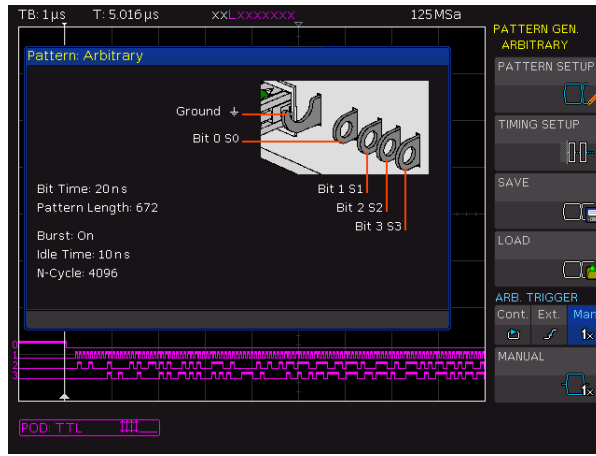| Your benefit	Features
See small signals often hidden in noise	High sensitivity and low noise means you'll be able to zoom in and see signals that are often hidden in the noise of other scopes
Easily access data on the R&S®RTC1000	Multiple connectivity options make it easy to document results and pull data off the scope via LAN or USB. MTP functionality allows the scope to act like a drive mounted on your PC to easily extract data and screenshots.
Standard functionality	Many standard features mean you get more capability for your investment

Bandwidth comparison

Bandwidth of up to 300 MHz allows the R&S®RTC1000 to grow to meet your future needs.

R&S®RTC1000 max. bandwidth: 300 MHz

Max. bandwidth: 100 MHz ← Keysight 1000X

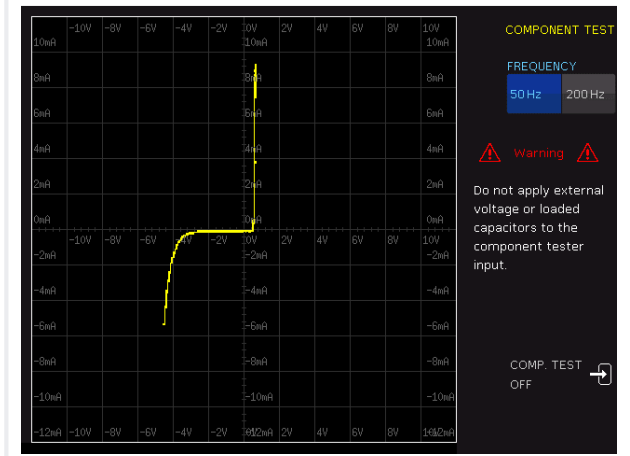| Parameter	R&S®RTC1000	Keysight 1000X
Acquisition system		
Bandwidth	50/70/100/200/300 MHz (upgradeable)	50/70/100 MHz (upgradeable)
2 channels / 4 channels	2 channels	2 channels
Max. sampling rate / memory depth	2 Gsample/s 2 Msample	1 Gsample/s EDU, 2 Gsample/s DSO 100 ksample EDU, 1 Msample DSO
Waveform update rate	10 000 waveforms/s	50 000 waveforms/s
Hardware input sensitivity	1 mV/div to 10 V/div	1 mV/div to 10 V/div
Multifunction		
Protocol	I^{2}C, SPI, UART/RS-232/RS-422/RS-485, CAN, LIN	I^{2}C, SPI, UART/RS-232/, CAN, LIN
Frequency analysis	128k points	64k points
Mixed signal (MSO)	8 channels, upgradeable 0.5 Gsample/s, 0.5 Msample	1 channel, standard
DVM	standard	standard
Component tester	standard	not available
Waveform generator	optional (R&S®RTC-B6)	not available
Pattern generator	optional (R&S®RTC-B6)	optional (G model)
Frequency response analyzer	not available	optional (G model)
Form factor		
Display	6.5" / 640 × 480 pixel resolution	7" / 800 × 480 pixel resolution
Interfaces	Standard USB device/host, standard LAN (fast web browser) MTP	Standard USB device/host
Audible noise	28.3 dB(A)	not specified

QuickView gives you the most important results at the push of a button

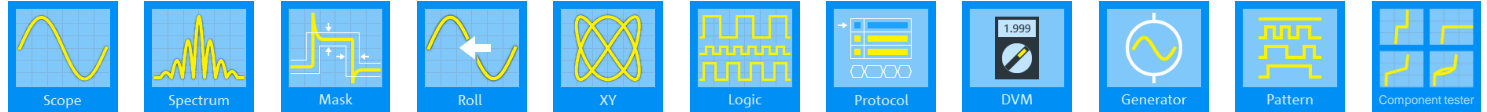## The integrated waveform generator outputs arbitrary waveforms and 4-bit signal patterns

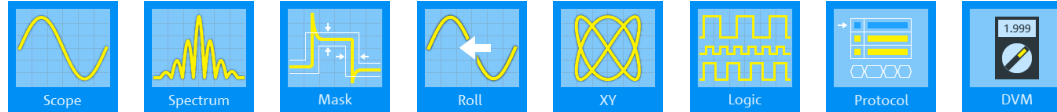## The integrated component tester helps you quickly assess faulty components

X-in-1 functionality

	Scope	Spectrum	Mask	Roll	XY	Logic	Protocol	DVM	Generator	Pattern	Component tester
R&S®RTC1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Keysight 1000X	✓	✓	✓	✓	✓	✓	✓	✓			

Advantages of R&S®RTC1000 over Keysight 1000X

2 x More memory

8 x More digital channels

3 x Faster boot time