

R&S®RTM3000

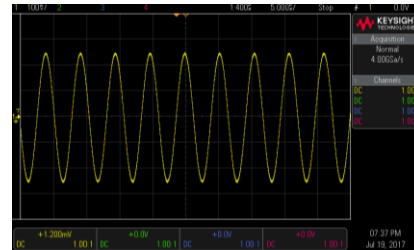
versus

Keysight 3000T X-Series

The R&S®RTM3000 outperforms the Keysight InfiniiVision 3000T X-series in key parameters with the power of ten.



R&S®RTM3000: 10.1" display, 1280 x 800 pixel resolution



Keysight X3000T: 8.5" display, 800 x 480 pixel resolution

Your benefit	Features
Sharp waveforms, more accurate measurements	10-bit ADC with the R&S®RTM3000 oscilloscope's low-noise frontend gives you more accurate measurements and sharper waveforms.
Capture long periods at high sample rate	The R&S®RTM3000 oscilloscope's standard deep memory gives you extra insurance for those difficult measurements where other scopes run out of capacity.
Debug in the domain you're most comfortable with	Not only does the R&S®RTM3000 provide excellent time domain capabilities, it also offers advanced frequency domain analysis with simple RF setup, spectrogram and time-gated RF views.

► For more information, see www.rohde-schwarz.com/catalog/rtm3000

Parameter	R&S®RTM3000	Keysight X3000T
Acquisition system		
Bandwidth (MHz)	100, 200, 350, 500, 1000 (1GHz) (upgradable)	100, 200, 350, 500, 1000 (1GHz) (upgradable)
ADC resolution	10-bit	8-bit
Max. resolution	16-bit with high resolution or averaging	12-bit with averaging
Max sampling rate	5 Gsample/s	5 Gsample/s
Memory depth	40 Msample per ch all channels 80 Msample interleaved	2 Msample per ch all channels 4 Msample interleaved
Segmented memory/history mode	optional – 400 Msample	standard – 4 Msample
Waveform update rate	64 000 waveforms/s	1 000 000 waveforms/s
MSO sampling rate / memory	5 Gsample/s / 80 Msample	1.25 Gsample/s / 2 Msample
Hardware dynamic range, full bandwidth	1 MΩ: 5mV to 100V 50 Ω: 5mV to 10V	1MΩ: 32mV to 80V 50Ω: 32mV to 40V
Multi-domain analysis	yes, 4 inputs up to bandwidth of base unit with spectrogram	yes, 4 inputs up to bandwidth of base unit
Accuracy		
DC gain accuracy	1.5 % to 3 %	2 % to 8 %
Channel-to-channel isolation	> 50 dB up to bandwidth of scope	> 40 dB up to bandwidth of scope
Form factor		
Display	10.1" (1280 x 800)	8.5" (800 x 480)
Touchscreen	yes – capacitive	yes - capacitive
Boot time	~ 10 s	~ 30 s

Innovative user interface, quick and easy to use

The R&S®RTM3000 user interface offers features not available on the Keysight X3000T.

- 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.

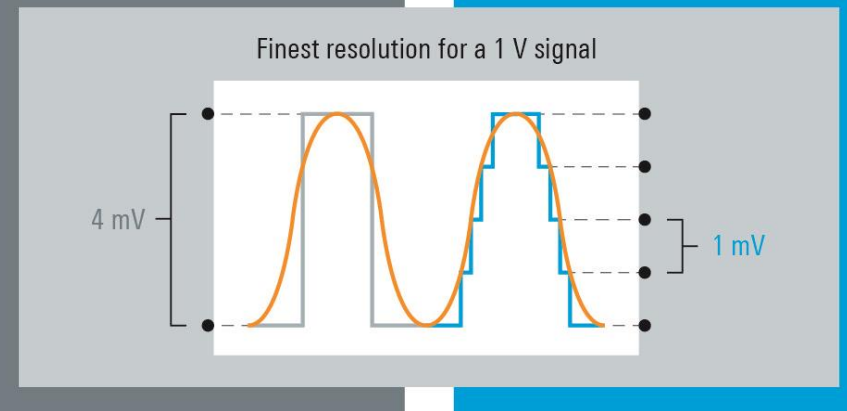
10-bit ADC provides 4 times the vertical resolution of 8-bit ADC

Traditional scope

8-bit vertical resolution

R&S®RTM3000

10-bit vertical resolution



Advantage factors of R&S®RTM3000 versus Keysight X3000T



4 times
more ADC resolution



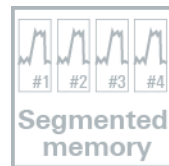
20 times
more memory



45%
more display area



3 times
faster boot time



100 times
more segmented
memory



2.7 times
more pixels