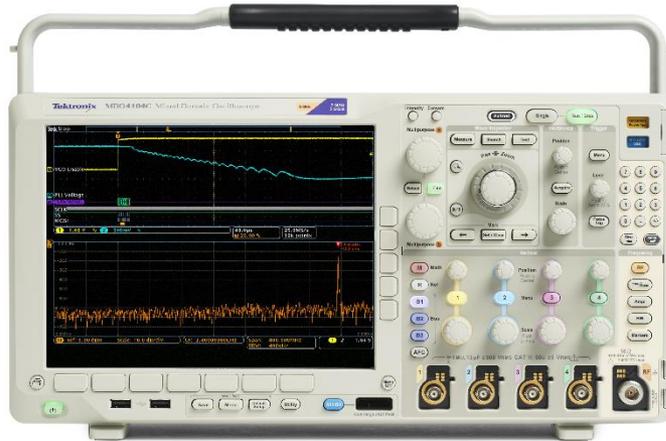


MDO4000C Series vs. Keysight N9320B Spectrum Analyzer

COMPETITIVE FACT SHEET



Mixed Domain Oscilloscope

- 4 analog channels
- 16 digital channels (optional)
- Integrated spectrum analyzer
- ← ▪ Dedicated front panel controls
- ← ▪ Dedicated N connector
- Integrated arbitrary/function generator (optional)
- Serial bus decoding and triggering (optional)

Key Specifications		Tektronix MDO4000C w/ opt. SA3		Keysight N9320B	
Frequency Range	✓	9 kHz - 3 GHz	✓	9 kHz - 3 GHz	
Capture / Analysis Bandwidth	✓	3 GHz	✗	1 MHz	
Phase Noise at 1 GHz CF 10 kHz offset 100 kHz offset	✓	<-108 dBc/Hz, <-111 dBc/Hz (typical) <-110 dBc/Hz, <-113 dBc/Hz (typical)	✗	<-88 dBc/Hz, <-90 dBc/Hz (typical) <-100 dBc/Hz, <-102 dBc/Hz (typical)	
Displayed Average Noise Level (DANL) at 1 GHz	✓	<-147 dBm/Hz, <-149 dBm/Hz (typical)	✗	<-127 dBm/Hz	
2nd Harmonic Distortion at 1 GHz (0 dB atten.)	✗	<-60 dBc, <-65 dBc (typical)	✓	<-73 dBc	
3rd Order Intermodulation Distortion at 1 GHz	✗	<-62dBc, <-65 dBc (typical)	✓	<-80 dBc, <-86 dBc (nominal)	
Other Input Related Spurious Response	✓	<-60 dBc, <-65 dBc (typical) w/ exceptions to <-55 dBc, <-60 dBc (typ.)	✓	<-60 dBc	
Residual Response	✓	<-85 dBm w/ exceptions at <-78 and <-73 dBm	✓	<-83 dBm	
Display Size and Resolution	✓	10.4" XGA	✗	6.5" VGA	
Dimensions (HxWxD in inches)	✓	9.0 x 17.3 x 5.8	✗	5.2 x 12.6 x 15.7	
Weight	✓	11 lbs.	✗	18 lbs.	
Warranty	✓	3 years	✓	3 years	

MDO4000C Series vs. Keysight N9320B Spectrum Analyzer

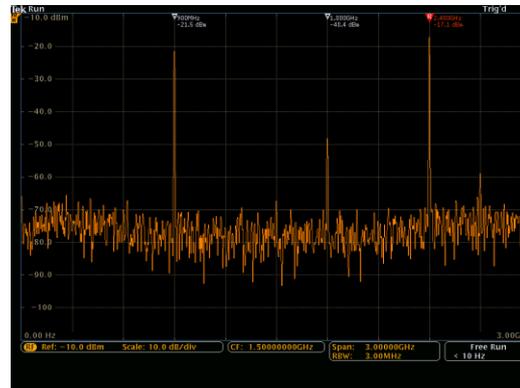
COMPETITIVE FACT SHEET

MDO4000C Capabilities Not Available on Keysight N9320B

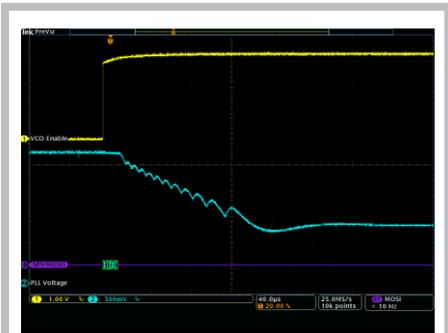
- 4 analog channels and 16 digital channels
- Function generator and DVM
- Serial / Parallel bus decode
- Capture bandwidth wide enough for modern RF signals
- Time-correlated views of analog, digital, serial / parallel buses and RF signals for complete system visibility. RF signals include:
 - Spectrum shown in Frequency Domain
 - Amplitude, Frequency, and Phase vs. Time traces shown in Time Domain



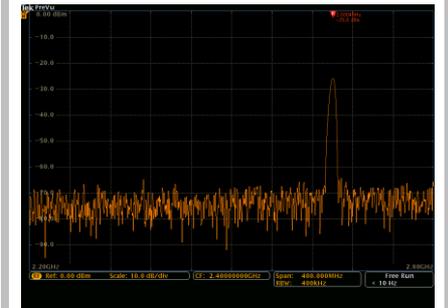
Correlating RF to other system signals
The most common application is making timing measurements from control logic (often serial or parallel bus commands) to when the RF output changes take effect.



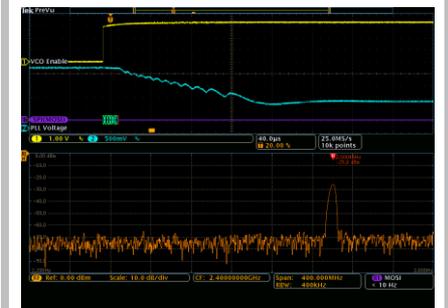
Exceptionally Wide Capture Bandwidth
With 3 GHz of capture bandwidth and long RF acquisition times, the MDO is the ultimate product for debugging modern wideband, time varying RF signals.



Time Domain Only



Frequency Domain Only



Both Domains at Once