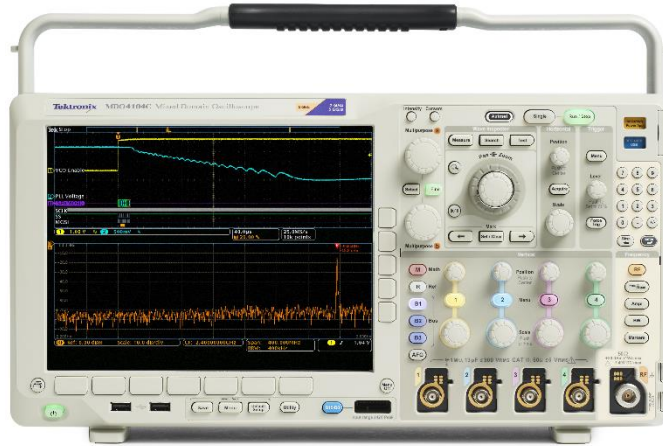


# MDO4000C Series vs. Keysight N9000A CXA Series

## 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)

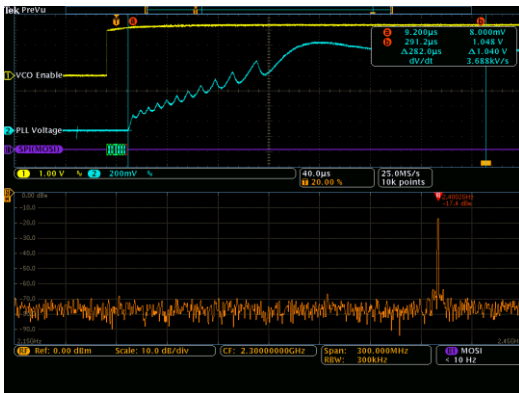
Key Specifications		Tektronix MDO4000C w/ opt. SA3		Keysight N9000A-503
Frequency Range	✓	9 kHz - 3 GHz	✓	9 kHz - 3 GHz
Capture / Analysis Bandwidth	✓	3 GHz	✗	10 MHz std (25 MHz opt)
Phase Noise at 1 GHz CF 10 kHz offset	✓	<-108 dBc/Hz, <-111 dBc/Hz (typical)	✗	<-102 dBc/Hz, <-110 dBc/Hz (typical)
Phase Noise at 1 GHz CF 100 kHz offset	✓	<-110 dBc/Hz, <-113 dBc/Hz (typical)	✗	<-108 dBc/Hz, <-110 dBc/Hz (typical)
Displayed Average Noise Level (DANL) at 1 GHz	✓	<-147 dBm/Hz , <-149 dBm/Hz (typical)	✓	<-148 dBm/Hz, <-150 dBm/Hz (typical)
2nd Harmonic Distortion at 1 GHz (0 dB atten.)	✗	<-60 dBc, <-65 dBc (typical)	✓	<-72 dBc
3rd Order Intermodulation Distortion at 1 GHz	✗	<-62dBc, <-65 dBc (typical)	✓	<-66 dBc, <-74 dBc (typical)
Other Input Related Spurious Response	✓	<-60 dBc, <-65 dBc (typical) w/ exceptions to <-55 dBc, <-60 dBc (typ.)	✓	<-60 dBc (typical)
Residual Response	✗	<-85 dBm w/ exceptions at <-78 and <-73 dBm	✓	<-90 dBm
Display Size and Resolution	✓	10.4" XGA	✗	8.4" XGA
Dimensions (HxWxD in inches)	✓	9.0 x 17.3 x 5.8	✗	7.0 x 16.8 x 14.5
Weight	✓	11 lbs.	✗	34 lbs.
Warranty	✓	3 years	✓	3 years

# MDO4000C Series vs. Keysight N9000A CXA Series

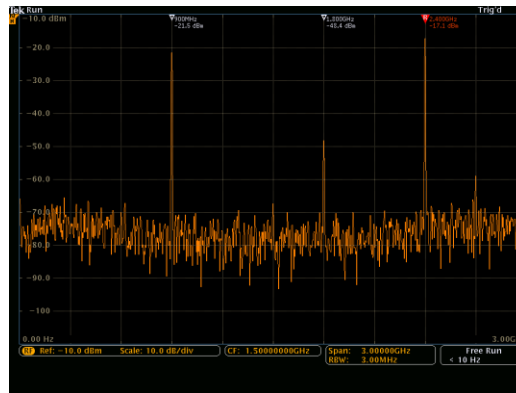
## COMPETITIVE FACT SHEET

### MDO4000C Capabilities Not Available on Keysight N9000A

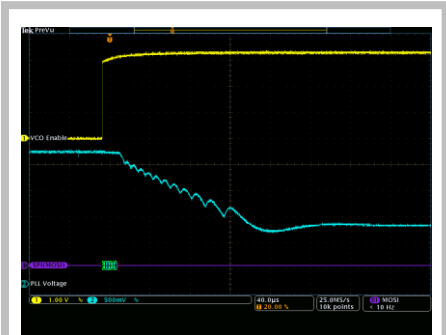
- 4 analog channels and 16 digital channels
- Function generator and DVM
- Serial / Parallel bus decode
- Capture bandwidth wide enough for modern RF signals
- Time-correlated views of analog, digital, serial / parallel buses and RF signals for complete system visibility. RF signals include:
  - Spectrum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



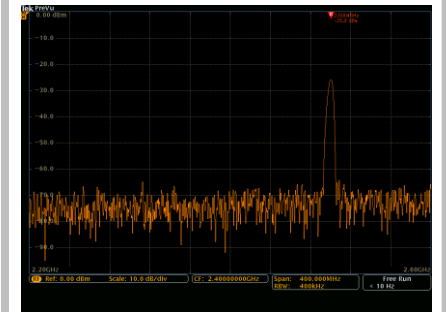
**Correlating RF to other system signals**  
 The most common application is making timing measurements from control logic (often serial or parallel bus commands) to when the RF output changes take effect.



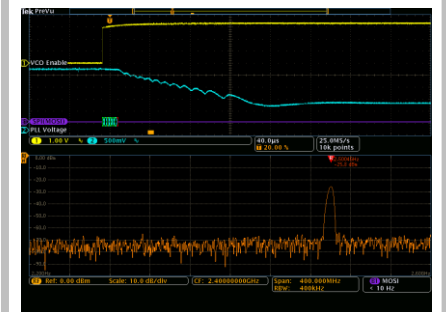
**Exceptionally Wide Capture Bandwidth**  
 With 3 GHz of capture bandwidth and long RF acquisition times, the MDO is the ultimate product for debugging modern wideband, time varying RF signals.



Time Domain Only



Frequency Domain Only



Both Domains at Once