

Industry Comparison:

Atten GA4063 versus Agilent N9320B, Rigol DSA1030A, GW Instek GSP830

3GHz Spectrum Analyzer Comparative chart



	Atten GA4063	Rigol DSA1030A	Agilent N9320B	GW Instek GSP830
Frequency range	9 kHz ~ 3 GHz	9 kHz ~ 3 GHz	9kHz ~ 3GHz	9kHz~3GHz
Resolution bandwidth	1Hz ~ 3MHz (1-3-10 sequence)	10Hz ~ 1MHz(1-3-10 sequence)	10 Hz to 1 MHz, in 1-3-10 sequence	3kHz,30kHz, 300kHz, 4MHz
Sweep width	0Hz,100Hz ~ 3GHz	0Hz,100Hz ~ 3GHz	0Hz, 500Hz ~ 2.9GHz	0Hz, 2kHz ~3GHz
Phase noise	-95dBc/Hz (offset10kHz)	-88dBc/Hz (offset10kHz) Typical Values	< -90 dBc/Hz (offset10kHz)	-80dBc/Hz(offset20kHz)
Maximum input level	+30dBm	+30dBm	+30dBm	+20dBm
Shows that the average Noise level	≤-130dBm (preamplifier off; 10 MHz ~ 2.5GHz, typ-140dBm) ≤-148dBm (pre-release; 10MHz to 2.5GHz, typ-160dBm that enables)	100kHz ~ 10MHz:-103dBm, 10MHz ~ 2.5GHz:-145dBm, 2.5GHz ~ 3GHz:-138dBm, Pre release	Preamp off 9 to 100 kHz : < -90 dBm, nominal 100 kHz to 1 MHz : < -90 dBm - 3 x (f/100 kHz) dB 1 to 10 MHz : < -124 dBm 10 MHz to 3 GHz : < -130 dBm + 3 x (f/1 GHz) dB Preamp on 100 kHz to 1 MHz: < -108 dBm - 3 x (f/100 kHz) dB 1 to 10 MHz: < -142 dBm 10 MHz to 3 GHz : < -148 dBm + 3 x (f/1 GHz) dB	1MHz ~ 15MHz:-135dBm 15MHz ~ 1GHz:-149dBm 1GHz ~ 3GHz:-146dBm