HSX SERIES RF SYNTHESIZERS

INDUSTRY LEADING SPECTRAL PURITY

The HSX Series was developed to be the cleanest CW sources available. Phase noise performance, spurious rejection and harmonic /sub-harmonic rejection were the primary focus points during the development cycle. The result is an extremely high performing, broadband CW source.

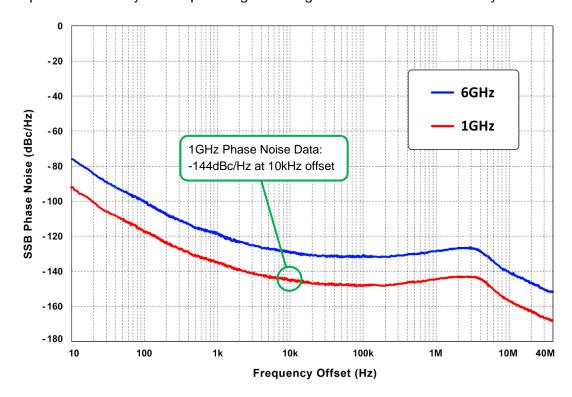
The HSX Series will initially be released as a 10MHz to 6GHz CW source with subsequent models operating to 12GHz and 20GHz to follow. This series of broadband frequency sources exhibit industry leading phase noise and spectral purity performance coupled with a highly accurate dynamic range of +20dBm to -110dBm. The 1U high form factor will be available in 1, 2, 3 or 4 channel models; all providing the ultimate in frequency accuracy, channel-to-channel stability and phase coherent channels.

SPECTRAL PURITY SPECIFICATIONS PREVIEW

Bandwidth	Output Power	Phase Noise at Max. Frequency			Harmaniaa	Considera
		10Hz offset	10kHz offset	10MHz offset	Harmonics	Spurious
10MHz to 6GHz	+20dBm to -110dBm	-77dBc/Hz	-128dBc/Hz	-140dBc/Hz	-40dBc	-86dBc
10MHz to 12GHz	+20dBm to -110dBm	-71dBc/Hz	-122dBc/Hz	-134dBc/Hz	-40dBc	-80dBc
10MHz to 20GHz	+20dBm to -110dBm	-67dBc/Hz	-118dBc/Hz	-130dBc/Hz	-40dBc	-74dBc

PHASE NOISE PERFORMANCE PREVIEW

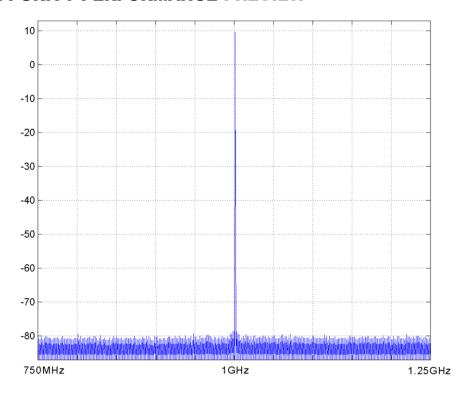
The HSX Series targets extremely low phase noise performance. The enhanced architecture maintains phase coherency while optimizing both long term and short term stability.





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SPECTRAL PURITY PERFORMANCE PREVIEW



ADDITIONAL SPECIFICATIONS PREVIEW

PARAMETER	MIN	TYPICAL	MAX	COMMENTS		
Frequency Range	10 MHz		6GHz	12GHz & 20GHz Max Frequency to be released		
Frequency Resolution	0.001Hz					
Switching Speed (Frequency)		600 µs	1 ms			
Output Power Range	-110 dBm		+20 dBm	Fully calibrated output accuracy		
Interface	USB, Ethernet, RS-232, GPIB. Java™ application GUI, LabVIEW™, MATLAB™, C++, etc. (open DLL)					
Product dimensions	1U (1.75 in.) high. 17 in. wide. 15 in. deep. 19" rack mount kit available.					
Warranty	3 years. Full manufacturer's warranty against defects. Parts and Labor.					



HSX9004A – 4 channel RF Synthesizer

Phase Coherent, 100% Independently Tunable Channels

3 YEAR FACTORY WARRANTY

Holzworth Instrumentation Inc. Boulder, Colorado, USA Sales: +1.303.325.3473 PREVIEW HSX Series May 2015