

INDUSTRY LEADING SPECTRAL PURITY

The HSX Series was developed to be one of 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 be initially released as a 10MHz to 6GHz CW source with subsequent models operating to 10GHz 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 +18dBm 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.

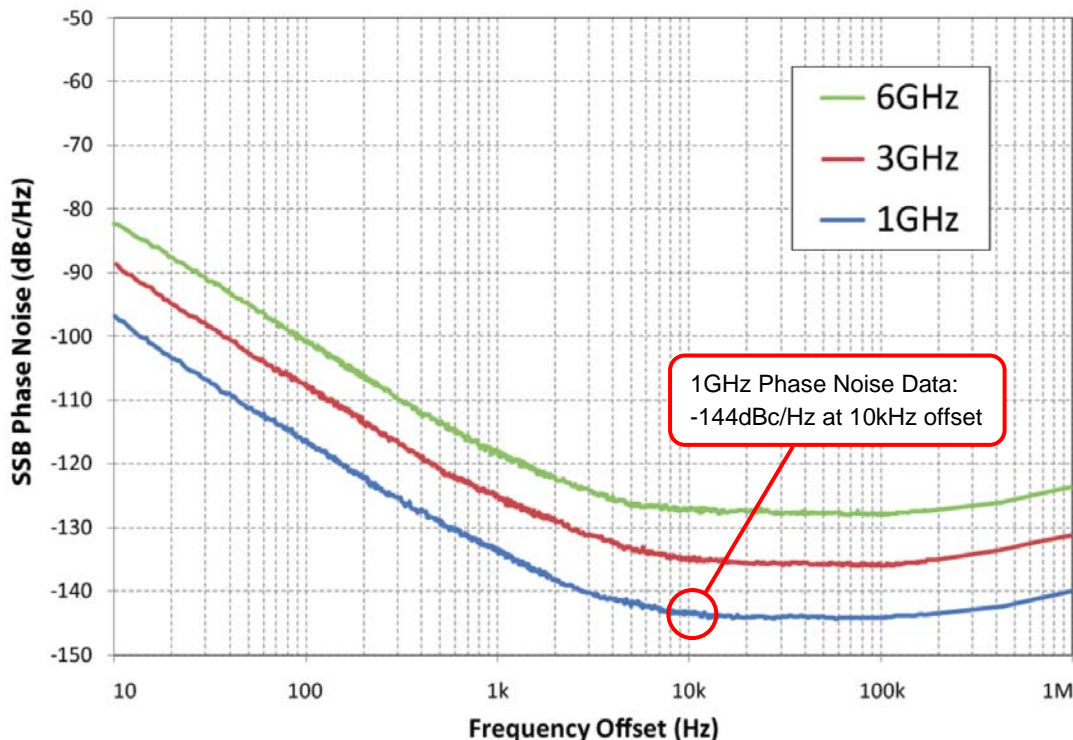
SPECTRAL PURITY SPECIFICATIONS PREVIEW

Bandwidth	Output Power	Phase Noise at Max. Frequency			Harmonics	Spurious
		10Hz offset ¹	10kHz offset	10MHz offset		
10MHz to 6GHz	+18dBm to -110dBm	-83dBc/Hz ¹	-126dBc/Hz	-138dBc/Hz	-40dBc	-87dBc
10MHz to 10GHz	+18dBm to -110dBm	-79dBc/Hz ¹	-122dBc/Hz	-134dBc/Hz	TBD	-87dBc
10MHz to 20GHz	+18dBm to -110dBm	-73dBc/Hz ¹	-116dBc/Hz	-128dBc/Hz	TBD	-87dBc

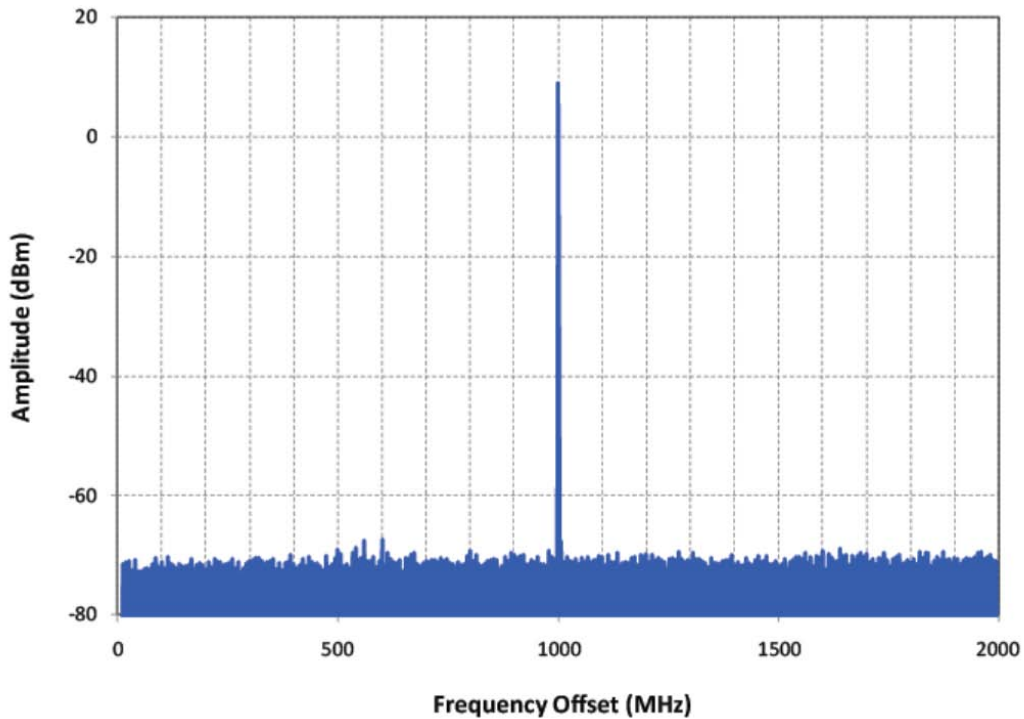
¹ Phase noise data plot reflects standard 100MHz internal reference performance. 10/100MHz internal reference will be used on final product.

PHASE NOISE PERFORMANCE PREVIEW

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



SPECTRAL PURITY PERFORMANCE PREVIEW



ADDITIONAL SPECIFICATIONS PREVIEW

PARAMETER	MIN	TYPICAL	MAX	COMMENTS
Frequency Range	10 MHz		6GHz	10GHz & 20GHz Max Frequency to be released
Frequency Resolution	0.001Hz			
Switching Speed (Frequency)		600 μ s	1 ms	
Output Power Range	-110 dBm		+18 dBm	Fully calibrated
Interface	USB or Ethernet. 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	2 years. Full manufacturer's warranty against defects. Parts and Labor.			



HSX9004A – 4 channel RF Synthesizer
 Phase Coherent, Fully Independent Channels