

The solution to your RF testing needs from simple signal generation to full EW Threat modeling, our RF/Vector Signal Generator has got you covered



RF/Vector Signal Generator

Features

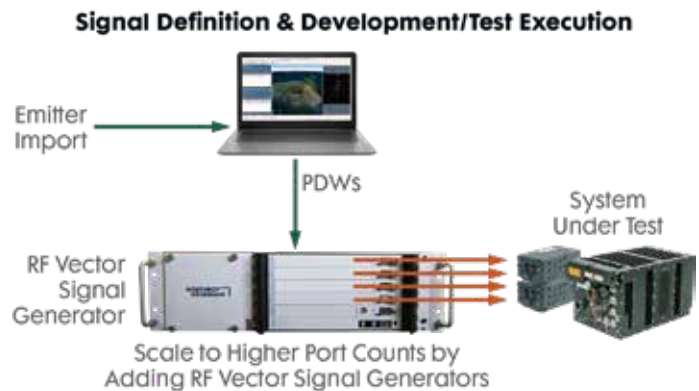
- Test your device with industry leading signal fidelity and RF performance
- Simple signal generator programming application
- 20MHz – 40GHz frequency range
- Compatibility modes
 - CEESIM scenarios and emitter models
 - MIDAS Blue PDW
 - Waveform descriptor words
- Scalable and configurable solution
- Multiaperture injection for direction finding antenna testing from a single 3U unit
- Quick turn deliveries available
- Quick setup and easy to use

The RF/Vector Signal Generator supports the generation of the highly complex signals present in today's electromagnetic environment, from dynamic communications signals to sophisticated electronic warfare threats. It provides the user with the flexibility to conduct a wide range of testing: from early sensor development and verification through to dense multiple emitter scenarios that include application of Angle of Arrival effects for Direction Finding testing. The modular design allows the user to meet their specific testing needs and add capabilities as needed. The range of configurations, and the option to connect multiple units, provides the ability to efficiently meet a variety of testing needs.

Configuration Options		
Base	500MHz - 18GHz frequency range	Multiple Signals with Omni Output
Multi-Port	Provides a total of four (4), phase-coherent RF outputs in the 500 MHz - 18 GHz frequency range	Multiple Signals with four (4) independently controllable Direction Finding Outputs (See Graphic Below)
ULB-EXT	Adds 20 MHz - 500 MHz frequency range	Comms signal testing
mmW-EXT	Adds 18 GHz - 40 GHz frequency range	Extended High Frequency signal generation
Dual	Dual 500 MHz - 18 GHz Signal Generators	Pulse on Pulse / Higher Signal Density

Parameter	
Frequency Control	Direct Digital Synthesis
RF Switching/tune time	0.5 usec
Frequency Range	20 MHz to 40 GHz
Frequency Resolution	1 Hz
Frequency Accuracy	±2 Hz
Phase Noise 20 MHz-18 GHz 1 kHz offset 10 kHz offset 100 kHz offset 1 MHz offset	-95 dBc/Hz -110 dBc/Hz -120 dBc/Hz -130 dBc/Hz
Phase Noise 18-40 GHz 1 kHz offset 10 kHz offset 100 kHz offset 1 MHz offset	≤-92 dBc/Hz ≤-107 dBc/Hz ≤-117 dBc/Hz ≤-125 dBc/Hz
Broadband Noise @±300 MHz offset from carrier 20 MHz-40GHz	-85 dBc/MHz (typ)
Spurious @ Output ports 20MHz-40 GHz	-70 dBc (typ)
Output Power	+5 dBm nominal
Phase Coherency	All signals
Rapid Field Calibration	User Adjustable

Parameter	
Modulation on Pulse (MOP) Patterns Supported	AM, FM, ØMod, Pulse Mod, BPSK,QPSK, QAM, user defined
FMOP Deviation	500 MHz
FMOP Accuracy	±1%
FMOP Unlock Offset	0 Hz
PMOP Resolution	1 degree
PMOP Accuracy	±2 degrees
Max MOP Sample Rate	1280 MSPS
MOP/IQ Internal Storage MOP/IQ Streaming	2 Giga-Samples via 10GbE
Preserve MOP pattern with TDOA Multiport Injection	Yes



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