

RF/MICROWAVE SIGNAL GENERATORS

4 GHz, 6GHz, 12GHz, 20GHz & 26.5 GHz available

1U Rackmount, OEM Options

STARTS AT \$13,167 USD



100 KHz to 26+ GHz
Model 845

- 90 to +13dBm power output (PE Model)
- 90 to +23 dBm Power Output (HP Model)
- Down to 10 μ s Frequency Switching Time
- Very Low SSB Noise (LN Option)
- 128 dBc/Hz @ 4 GHz Carrier (100 kHz offset)
- Powerful trigger and sweeping modes
- Comprehensive AM, low-distortion, wideband DCFM, & high speed pulse modulation

STARTS AT \$6,950 USD



9 KHz to 3.4 GHz/
9 KHz to 6 GHz
Model 835-3 / 835-6

- < 200 μ s Frequency Switching Time
- Excellent SSB Noise
- 120 dBc/Hz @ 3 GHz Carrier (20 kHz offset)
- Comprehensive AM, low-distortion, wideband DCFM, & high speed pulse modulation
- Powerful trigger and sweeping modes

STARTS AT \$4,000 USD



0.01 to 20 GHz 9 KHZ TO 3 GHZ
Model 845-M Model 835-M

- Down to 10 μ s Frequency Switching Time
- Low Phase Noise
- Ultra-Compact
- Full GUI Control
- FM, Chirps, PULSE
- Internal OCXO reference
- Single 6V supply

KEY INSTRUMENT MODEL FEATURES:

- LAN/USB/GPIB remote control with SCPI 1999 command set
- Complimentary powerful & easy to use GUI
- Compact, robust, lightweight, portable & rugged design
- Sealed, fan-less, enclosure (low power consumption)
- Internal rechargeable battery options
- Field carrying case available
- Single and double rackmounts available

OPTIONS-12,20,26.5 GHZ

- LO - No Modulation (CW Only) 20 & 26.5 GHz only
- HP - High Power (output power enhanced)
- FS - Ultra Fast Switching
- LN - Ultra Low Phase Noise
- R - 1U rackmount enclosure
- PE - Power Range ext. to -90 dBm
- G - GPIB Interface
- RB - Internal rechargeable battery

CUSTOM OEM SOLUTIONS

Fully customize-able form factor
- (benchtop, rackmount, card level, board level, etc.)
Up to 26.5 GHz with additional options available (FS, LN, etc.)
Seamless integration and system implementation



Berkeley Nucleonics Corp

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RF/MICROWAVE SIGNAL GENERATORS

6.2GHz, 12.5GHz, 20GHz available

Multichannel Phase Coherent Outputs

STARTS AT \$21,835 USD

Embeddable EMI Hardened OEM Solution



Model 845-OEM
OEM Board-level
package with special
shielded enclosure

STARTS AT \$22,000 USD

Model 855 Multichannel Phase Coherent Outputs



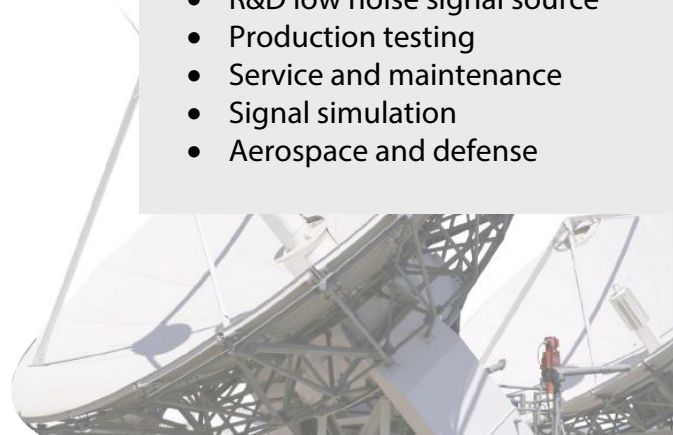
The Model 855 series is a phase coherent multi-output fast switching and low phase noise signal generator with a frequency range from 10 MHz to 6.2, 12.5 or 20.0 GHz. The 855 is ideally suited for a wide range of application, where good signal quality accurate and wide output power range is required. Excellent phase noise is combined with spurious and harmonic rejection. A high-stability OCXO reference provides excellent frequency accuracy and stability. The generator accepts external 10, 100 or 1000 MHz references.

KEY INSTRUMENT MODEL FEATURES:

- Frequency and power switching time down to 10us
- Exceptional phase noise performance:
 - 500MHz at 1KHz offset: -131 dBc / Hz
 - 4GHz at 1KHz offset: -115 dBc / Hz
 - 20GHz at 1KHz offset: -100dBc / Hz
- Adjustable output power from -90dBm to +27dBm
- 2 to 8 completely independent channels
- Rack-mount and Bench-top enclosures

KEY APPLICATIONS

- ATE
- Quantum Computing
- R&D low noise signal source
- Production testing
- Service and maintenance
- Signal simulation
- Aerospace and defense



BNC

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REAL TIME SPECTRUM ANALYZERS

8 GHz, 18 GHz & 27 GHz available

with up to 160 MHz RTBW

STARTS AT \$6,650 USD



MODELS:

RTSA 7550-8

- 9 kHz to 8 GHz with 100 MHz Instantaneous BW

RTSA 7550-18

- 9 kHz to 18 GHz with 100 MHz Instantaneous BW

RTSA 7550-27

- 9 kHz to 27 GHz with 100 MHz Instantaneous BW

KEY FEATURES:

- Frequency Range from 9 kHz to 8, 18, or 27 GHz
- DSP filtering and decimation
- Real-time FPGA triggering for detection of elusive, time-varying signals
- Real-Time Bandwidth (RTBW) up to 160 MHz
- Probability of Intercept (POI) as short as 1.02 μ s
- Spurious Free Dynamic Range (SFDR) up to 100 dBc
- 10 MHz in/out for multi-channel synchronization
- Analog I/Q outputs for higher sampling rate digitization
- Open source Python, LabVIEW, MATLAB®, C/C++ and SCPI/VRT APIs

The Model RTSA7550 is a high performance Software-defined Radio Receiver designed for various electronic warfare applications. The large operating frequency range of 100 kHz up to 27 GHz and wide instantaneous bandwidths allow meet the challenges of spectrum monitoring. Packaged in a small, remote deploy-able form factor allows for field use at a superior cost performance than rival high-end receivers.

- High Performance Software-defined Radio Receiver
- Frequency Range from 100 kHz up to 27 GHz with wide instantaneous bandwidth up to 160 MHz
- 1 Gb Ethernet interface with both desktop and remote access and reconfiguration
- Rich API support with C/C++, Python, MATLAB, LabVIEW
- Intuitive Real-time Spectrum Analyzer GUI



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REAL TIME SPECTRUM ANALYZERS

8 GHz, 18 GHz & 27 GHz available

with 160 MHz RTBW

RTSA7550 Top Level Specifications

Model	8 GHZ	18/27 GHz	Comments
SSB Phase Noise	-100 dBc/Hz	-100 dBc/Hz	10 kHz Offset @ 1 GHz
SSB Phase Noise	-121 dBc/Hz	-121 dBc/Hz	1 MHz Offset @ 1 GHz
DANL	-150 dBm/Hz	-161 dBm/Hz	@ 1 GHz
DANL	-145 dBm/Hz	-157 dBm/Hz	@ 3 GHz
DANL	-131 dBm/Hz	-158 dBm/Hz	@ 8 GHz
(TOI) Third Order Intercept	+12 dBm	+12 dBm	@ 1 GHz



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PHASE NOISE TEST SYSTEMS / SIGNAL SOURCE ANALYZERS 5MHz to 40GHz



STARTS AT \$48,000.00 USD

KEY PHASE NOISE MEASUREMENT CAPABILITIES:

- Extremely accurate Cross-correlation engine
- Complete broadband solution 5 MHz up to 40 GHz
- Absolute and Additive PN measurements
- 0.01 Hz to 100 MHz offset range
- Ultra low-noise internal references
- Very low Instrument Noise Floor (-188 dBc/Hz)
- Pulse measurement capabilities
- Amplitude Noise Measurements
- GUI or ATE interface
- Fastest ATE measurement speed in industry (<100ms)

PHASE NOISE ANALYSIS

- Extremely powerful and easy to use
- A fraction of the size, weight, and cost of competitive systems
- Included comprehensive GUI w/ lifetime Support & upgrades provided
- ATE Optimized Fast Measurement Modes
- Ability to use external references
- 3 independent tuning voltages (-5 to 22V)
- 2 independent supply voltages (0 to 14 V, 600 mA each)
- Complete oscillator test bench



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PHASE NOISE TEST SYSTEMS / SIGNAL SOURCE ANALYZERS

5MHz to 40GHz

7330 20G RF Frequency Range	5 MHz		40 GHz	using internal references using external references
Input Power Range < 7 GHz 7-26 GHz > 26 GHz	tbd tbd	0 dBm 5 dBm 5 dBm	+20 dBm +20 dBm +20 dBm	+26 dBm is damage level
Input impedance VSWR		50 Ω 2		AC coupled, 10V DC max
Offset Analysis Range Resolution	0.01 Hz 2		100 MHz 3800	points per decade, RBW adjustable
Measurement Accuracy		±4 dB ±3 dB ±2 dB		< 10 Hz offset < 1 kHz offset > 1 kHz
System Phase Noise Floor (100 MHz) 1 Hz 10 Hz 100 Hz 1 kHz 10 kHz 10 MHz		-140 dBc/Hz -150 dBc/Hz -160 dBc/Hz -175 dBc/Hz -188 dBc/Hz -188 dBc/Hz		(cross-correlation, external references)

