

RF/MICROWAVE SIGNAL GENERATORS

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

1U Rackmount, OEM Options

STARTS AT \$13,167.00 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 \$6,950.00



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 \$4,000.00 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

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

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



BNC Berkeley Nucleonics Corp

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RF/MICROWAVE SIGNAL GENERATORS

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

1U Rackmount, OEM Options

	Model 845-20	Agilent MXG N5183A	Agilent E8257D PSG w options	R&S SMB B120L w options
Freq.range	100 kHz-20.5 GHz	250 kHz -20 GHz	250 kHz -20 GHz	100 kHz -20 GHz
Resolution	0.001 Hz	0.01 Hz	0.01 Hz	0.001 Hz
Switching Speed	0.2 ms	5 ms (1.15 ms	9 ms	3 ms
Option FS	0.01 ms*	option UNZ)		
Power range	-30 to +20 dBm	-90 to +7 dBm	-135 to +15 dBm	-20 to +22 dBm
Option PE3	-190 to +13 dBm			
Option HP	-20 to +26 dBm			
Resolution	0.01 dB	0.01 dB	0.01 dB	0.01 dB
Phase Noise 10g	-108 dBc/Hz	-98 dBc/Hz	-115 dBc/Hz	-108 dBc/Hz
OCXO	<0.1 ppm	<1 ppm	<0.05 ppm	<0.1 ppm
Option LN	-117 dBc/Hz			
	0.01 ppm			
Modulations	AM/FM/PM/Pulse Trains/Chirps	optional	optional	optional
Extras	Portable Internal Battery	-	-	-
Weight, size	2.5 kg	12.8 kgs	22 kgs	6.9 kgs
Power consump.	<15 W	250 W	250 W	>90 W
List Price	\$17,000.00 USD	\$42,000.00 USD	\$68,000.00 USD	\$51,000.00 USD

* FS Option



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PHASE NOISE TEST SYSTEMS / SIGNAL SOURCE ANALYZERS



STARTS AT \$38,500.00 USD

Model 7070
2 MHz to 7 GHz
Phase Noise Tester



STARTS AT \$49,995.00 USD

Model 7300
2 MHz to 26+ GHz
Phase Noise Tester

KEY PHASE NOISE MEASUREMENT CAPABILITIES:

- Very accurate Cross-correlation engine
- Broadband 2 MHz up to 26 GHz
- Absolute and Additive PN measurements
- 0.01 Hz to 50 MHz offset range
- Ultra low-noise internal references
- Very low Instrument Noise Floor (-185 dBc/Hz)
- Pulse measurement capabilities
- GUI or ATE interface
- Fastest ATE measurement speed in industry (<200ms)

PHASE NOISE ANALYSIS

- Extremely powerful and easy to use
- A fraction of the size and weight 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 (0-20V)
- 2 independent supply voltages (0-16 V, 500 mA each)



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PHASE NOISE TEST SYSTEMS / SIGNAL SOURCE ANALYZERS

Equipment	Model 7070	Model 7300	Keysight E5052B	R&S FSUP8
Freq. range	2 MHz to 7.0 GHz	2 MHz to 26 GHz	10 MHz to 7 GHz	1 MHz to 8 GHz
Offset range	0.01 Hz to 50 MHz	0.01 Hz to 50 MHz	1 Hz to 100 MHz	1 Hz to 30 MHz
PhN Sensitivity at 1GHz, 1 average (option LN)				
@1 Hz	-52 (-80)	-52 (-80)	-60	-70
@10 Hz	-85 (-100)	-85 (-100)	-91	-90
@1K Hz	-135	-135	-128	-127
@10 KHz	-145	-145	-137	-133
@100 KHz	-155	-155	-144	-145
@1 MHz	-170	-170	-160	-162
Measurement Speed (1Hz start; per correlation)	10 secs	10 secs	10 secs	
Input power range	-15 to +20 dBm	-15 to +20 dBm	-15 to +20 dBm	-10 to 30 dBm
Uncertainty				
< 100 Hz	< 3 dB	< 3 dB	< 3 dB	< 3 dB
> 100 Hz	< 2 dB	< 2 dB	< 2 dB	1 dB typ
Internal/External References	Y/Y	Y/Y	Y/N	Y/N
MEASUREMENT MODES				
Absolute Phase Noise	Y	Y	Y	Y
Additive Phase & Amplitude Noise	Y	Y	N	N
Amplitude noise Measurement	N	N	Y	N
Spectrum/FFt measurement	Y	Y	Y	Y
Transient measurement	Y	Y	Y	Y
INTERFACES				
GPIO	Y(optional)	Y(optional)	Y	Y
USB/TMC	Y	Y	Y	Only USB
LAN	Y	Y	Y	Y
VISA/SCPI	Y	Y	Y	Y
Power Consumption	20 W	20 W	300 W	<500 W
Weight	5 kgs	5 kgs	17.6 kgs	24.5 kgs
List Price	\$35,615.00	\$46,000.00	\$150,000.00	\$150,000.00
Warranty	2 years	2 years	2 years	

REAL TIME SPECTRUM ANALYZERS

8 GHz, 18 GHz & 27 GHz available

with up to 160 MHz RTBW

STARTS AT \$3,950.00 USD



MODELS:

RTSA7500-8B

- 100 kHz to 8 GHz with 10 MHz Instantaneous BW

RTSA7500-8

- 100 kHz to 8 GHz with 100 MHz Instantaneous BW

RTSA7500-18

- 100 kHz to 18 GHz with 100 MHz Instantaneous BW

RTSA7500-27

- 100 kHz to 27 GHz with 100 MHz Instantaneous BW

KEY FEATURES:

- Frequency Range from 100 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 RTSA7500 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

RTSA7500 Top Level Specifications

Model	8 GHZ	18/27 GHz	Comments
SSB Phase Noise	-97 dBc/Hz	-97 dBc/Hz	10 kHz Offset @ 1 GHz
SSB Phase Noise	-102 dBc/Hz	-102 dBc/Hz	100 kHz 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	-163 dBm/Hz	@ 8 GHz
(TOI) Third Order Intercept	+12 dBm	+12 dBm	@ 1 GHz



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