


Signal Hound®

BB60D Real-Time Spectrum Analyzer



Signal Hound designs and builds premium accessible test and measurement equipment for engineers and RF professionals around the globe.

SAFEGUARD AGAINST INTERFERING SIGNALS IN HIGH TRAFFIC RF ENVIRONMENTS - SECURE AND DETAILED.

The BB60D is a high-speed real-time spectrum analyzer and RF recorder, with a tuning range from 9 kHz to 6 GHz. It collects 80 million IF samples per second, and streams I/Q data to a computer via USB 3.0 at 140 MB/sec. This impressive unit offers increased power and performance, enabling concise identification of a targeted weak signal with strong signals nearby. The increased selectivity and improved dynamic range make the BB60D an outstanding tool for spectrum analysis and RF recording.

APPLICATIONS

- General Purpose RF Test & Measurement
- EMC pre-compliance
- Phase Noise Characterization
- EVM Measurement
- Channel Characterization
- CCDF
- WiFi Characterization
- BlueTooth Characterization
- Calibration
- Manufacturing Test
- RF Power Measurement
- Demodulation
- Antenna Pattern Measurement

FEATURES

- Up to 24 GHz/sec sweep speed
- 9 kHz to 6 GHz frequency range
- Wide dynamic range from -158 dBm to +10 dBm
- Resolution bandwidths available from 10 Hz to 10 MHz
- 27 MHz instantaneous bandwidth
- Includes sub-octave preselectors



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Production Specifications

Frequency Range	9 kHz to 6.0 GHz	
Sweep Speed	• 24 GHz/sec	
Sub-Ocave Preselector	• 130 MHz to 6 GHz	
Displayed Average Noise Level (DANL)	Input Frequency Range	dBm/Hz
	• 9 kHz to 500 kHz	-140 dBm
	• 500 kHz to 30 MHz	-154 dBm
	• 30 MHz to 6 GHz	-158 dBm + 1.0 dB/GHz
I/Q Acquisition Modes	Calibrated Streaming I/Q: Up to 27 MHz of selectable I/Q streaming bandwidth	
Timebase Accuracy	• ±1 ppm per year	
Resolution Bandwidths (RBW)	• 10 Hz to 10 MHz	
Linearity	IP ₂	
	• 100 kHz to 30 MHz	+55 dBm
	• 30 MHz to 130 MHz	+36 dBm
	• 130 MHz to 6 GHz	+55 dBm
	IP ₃	
	• +10 dBm	
Amplitude Accuracy	Range: +10 dBm to DANL	
	• +/- 2 dB (Flatop Windowing)	
Residual Responses REF LEVEL ≤ -30 dBm	Input Frequency Range	Residual Level
	• 500 kHz to 6 GHz	-120 dBm
Phase Noise at 1 GHz Center Frequency	Offset Frequency	dBc/Hz
	• 100 Hz	-80
	• 1 kHz	-90
	• 10 kHz	-93
	• 100 kHz	-97
	• 1 MHz	-117
Lo Leakage at RF Input	• ≤ -80 dBm	
Spurious Mixer Responses	Input Frequency Range	Spurious Level
	• 9 kHz to 6 GHz	-50 dBc
VSWR	• < 1.4 typical	
Synchronization	1 PPS GPS input port enables ±50ns time stamping	
Operating Temperature	Standard 32°F to 149°F (0°C to +65°C)	
Size and Weight	• 8.63" x 3.19" x 1.19" (219mm x 81mm x 30mm) • 1.10 lbs. (0.50 kg)	
Power Consumption	• 6 Watts (typ)	
Interface	USB 3.0	
System Requirements	Windows or Linux Operating System, x64_86 architecture	

Ordering Options

Standard, Temperature Range 32°F to 149°F (0°C to +65°C)

Option 1, Temperature Range -40°F to 149°F (-40°C to +65°C)

Option 10, External 5V Input (External Power Supply Not Included)