

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

## EXACTLY WHAT'S NEEDED TO ASSESS EXTERNAL INTERFERENCE, USING AN INTUITIVE INTERFACE - RELIABLE RESULTS.

The BB60C 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. Utilizing I/Q sample rates that allow fine grained control over how much spectrum should be recorded. The BB60C enables undetectable events to be easily detected.

### 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
- Real-time Analysis Features



# BB60C Real-Time Spectrum Analyzer

May 2023

## Production Specifications

Frequency Range	9 kHz to 6.0 GHz		
Sweep Speed	• 24 GHz/sec		
Displayed Average Noise Level (DANL)	Input Frequency Range	dBm/Hz	
	• 9 kHz to 500 kHz	-140 dBm	
	• 500 kHz to 10 MHz	-154 dBm	
	• 10 MHz to 6 GHz	-158 dBm + 1.1 dB/GHz	
I/Q Acquisition Modes	Calibrated Streaming I/Q: Up to 27 MHz of selectable I/Q streaming bandwidth		
Timebase Accuracy	• $\pm 1$ ppm per year		
Resolution Bandwidths (RBW)	• 10 Hz to 10 MHz		
Amplitude Accuracy	Range: +10 dBm to DANL • +/- 2.0 dB (Flatop Windowing)		
Residual Responses REF LEVEL $\leq$ -50 dBm	Input Frequency Range	Residual Level	Applicable Serial Prefix
	• 500 kHz to 6 GHz	-106 dBm	4119, 4150, 4226, 4296
	• 500 kHz to 6 GHz	-103 dBm	5047 and Higher
Phase Noise at 1 GHz Center Frequency	Offset Frequency	dBc/Hz	
	• 100 Hz	-70	
	• 1 kHz	-76	
	• 10 kHz	-83	
	• 100 kHz	-93	
	• 1 MHz	-117	
Lo Leakage at RF Input	• $\leq$ -80 dBm		
Spurious Mixer Responses	Input Frequency Range	Spurious Level	
	• 9 kHz to 6 GHz	-50 dBc	
Synchronization	1 PPS GPS input port enables $\pm 50$ ns 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)