Signal Hound®

BB60C Real-Time Spectrum Analyzer & RF Recorder

9 kHz to 6.0 GHz

BB60C 9 kHz to 6 GHz
Real-Time Spectrum Analyzer / RF Recorder

MADE IN USA
Patent Pending

Signal Hound®
SignalHound.com

Exceptionally Clean Spurious and Residual Responses

Includes powerful Spike™ spectrum analyzer software

Selectable Streaming Bandwidths from 250 kHz up to 27 MHz

Captures RF events as short as 1µs with 100% probability of intercept (POI)

Powered via USB connection to PC, no external power required

Sweeps 24 GHz / sec

-40°C to +65°C Operating Temperature Range Available

Signal Hound®

BB60C Real-Time Spectrum Analyzer

4 March 2021   **NSN** 6625-01-656-1527 (Standard, not Opt 1)

The Signal Hound BB60C is a high speed real-time spectrum analyzer (RTSA) and RF recorder. It tunes from 9kHz to 6GHz, collects 80M samples/second, streams data to your computer via USB3.0 at 140MB/sec.

The BB60C comes with the Spike™ API and spectrum analyzer application, wtih selectable color persistence display mode, 2-D color waterfall, spectrum emission masks, and the following analysis modules: analog/digital/WLAN modulation analysis, EMC precompliance measurements, noise figure, and interference hunting measurements.

FREQUENCY

- Range: 9 kHz to 6.0 GHz
- Streaming calibrated I/Q data: 250 kHz to 27 MHz of selectable IF bandwidth that is amplitude corrected
- Resolution Bandwidths (RBW): 10 Hz to 10 MHz
- Internal Timebase Accuracy: ±1ppm per year
- Sweep Speed (RBW ≥10 kHz): 24 GHz/sec

AMPLITUDE (RBW ≤100 KHZ)

- Range: +10 dBm to Displayed Average Noise Level (DANL)
- Absolute Accuracy:
  - ±2.0 dB (arbitrary & non-native RBW's)
  - +2.0dB/−2.6dB (native RBW's-faster DSP)

DISPLAYED AVERAGE NOISE LEVEL

Input Frequency Range	DANL
9 kHz to 500 kHz	−140dBm/Hz
500 kHz to 10 MHz	−154dBm/Hz
10 MHz to 6 GHz	−158dBm/Hz + 1.1dB/GHz

RESIDUAL RESPONSES: REF LEVEL ≤ -50dBm, 0dB ATTENUATION

Input Freq. Range	Residual Level	Applicable Serial Prefix
500 kHz to 6 GHz	−106dBm	4119, 4150, 4226, 4296
500 kHz to 6 GHz	−103dBm	5047 and higher

LO LEAKAGE ≤ −80 dBm

PHASE NOISE AT 1 GHz

Frequency Offset	dBc/Hz
100 Hz	−70
1 kHz	−76
10 kHz	−83
100 kHz	−93
1 MHz	−117

SPURIOUS & IMAGE REJECTION (any ref level from -50dBm to +10dBm, using 5dB increments and input signal 10dB below ref level) [Auto ATTEN, ≤30kHz RBW]

Input Frequency Range	Spurious Level
9kHz to 6GHz	−50dBc

SYNCHRONIZATION (≤ 20MHz IBW)

1 PPS GPS input port enables ±50ns time stamping

OPERATING TEMPERATURE

32°F to 149°F (0°C to +65°C) Standard;
−40°F to 149°F (−40°C to +65°C) for Option-1

SIZE AND WEIGHT

- 8.63" x 3.19" x 1.19" (219mm x 81mm x 30mm)
- Net, 1.10 lbs. (0.50 kg)

POWER

- One USB 3.0 port and one adjacent USB 2.0 or USB 3.0 port

CONTROL AND COMMUNICATION

- USB 3.0 serial bus

SYSTEM REQUIREMENTS

Intel i7, 3rd generation or later with a quad core processor, Microsoft® Windows® 10 or Ubuntu™ Linux, one USB 3.0 port, and one adjacent USB 2.0 or USB 3.0 port Note: RF recording using streaming I/Q bandwidths > 8MHz requires the computer's mass storage drive to have at least 250MB/sec of sustained write speed such as an SSD, RAID-0, or RAID-5.