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

Digital modulation analysis tools included

Selectable Streaming Bandwidths from 250 kHz up to 27 MHz

Operate Remotely with vPro Enabled Intel i5 NUC Computer, model DC53427HYE

Exceptionally Clean Spurious and Residual Responses

Sweeps 24 GHz / sec

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

Captures RF Events as Short as 1μs with 100% Probability of Intercept

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Signal Hound®

BB60C Real-Time Spectrum Analyzer & RF Recorder
6 March 2015

The Signal Hound BB60C is a high speed real-time spectrum analyzer (RTSA) and RF recorder. It tunes from 9kHz to 6GHz, collects 80MSamples/second, streams data to your computer via USB3.0 at 140MB/sec., comes with the Spike™ API and spectrum analyzer application, has selectable color persistence display mode, 2-D color waterfall, and digital modulation analysis tools.

The digital modulation analysis tools include constellation diagrams, EVM measurements, symbol tables, and bit pattern matching for BPSK, DBPSK, QPSK, DQPSK, OQPSK, π/4DQPSK, 8PSK, D8PSK, and QAM16.

With a US price point under $3K, the BB60C is a compelling choice for a broad range of applications.

FREQUENCY
· Range: 9 kHz to 6.0 GHz
· Streaming calibrated I/Q data: 250kHz to 27MHz 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): 24GHz/sec

AMPLITUDE (RBW ≤100KHZ)
· 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
9kHz to 500kHz	−140dBm/Hz
500kHz to 10MHz	−154dBm/Hz
10MHz to 6GHz	−158dBm/Hz + 1.1dB/GHz

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

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