



## TEST EQUIPMENT PLUS

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## Data Sheet

# Signal Hound BB60A, Real-Time Spectrum Analyzer/RF Recorder

The BB60A is a high speed spectrum analyzer and a real-time RF recorder. It has 20MHz of real-time bandwidth, tunes from 9kHz to 6.0GHz, collects 80MSamples/second, and streams data to your computer via USB3.0 at 140MB/sec.

### Frequency

Range: 9kHz to 6.0GHz

Streaming Digitized IF or I/Q: 20MHz real-time analysis BW

Resolution Bandwidths (RBW): 10Hz to 10MHz

Internal Timebase Accuracy:  $\pm 1$ ppm per year

Sweep Speed (RBW  $\geq 10$ kHz):

("SW Spur Reject" off) 24GHz/sec

("SW Spur Reject" on) 12GHz/sec

### Amplitude (RBW $\leq 100$ kHz, IF auto-cal on)

Range: +10dBm to Displayed Average Noise Level (DANL)

Absolute Accuracy:  $\pm 2.0$ dB

### Displayed Average Noise Level (DANL) dBm/Hz

9 kHz to 100 kHz -123

100 kHz to 200 kHz -132

200 kHz to 300 kHz -142

300 kHz to 6 GHz -152

### Residual Responses (including 10MHz timebase multiples):

(Ref Level  $\leq -50$ dBm, 0dB Atten) -90 dBm

LO Leakage: -65dBm

### Spurious and Image Rejection (-20dBFS into ADC, 0dB Attn, max gain) typical

SW Spur Reject	9kHz to 1.5GHz	1.5GHz to 5.0GHz	5.0GHz to 6.0GHz
Off	-39dBc	-37dBc	-22dBc
On	-39dBc	-46dBc	-48dBc

### Phase noise at 1 GHz

Frequency Offset dBc/Hz

100 Hz -70

1 kHz -78

10 kHz -84

100 kHz -96

1 MHz -116

### Recommended Computer

Intel i7, 2<sup>nd</sup> or 3<sup>rd</sup> generation, quad core processor with two adjacent USB 3.0 ports

Optional RF recording: Sustained 250MB/sec Hard Drive write speed

### Synchronization

1-PPS GPS input port enables  $\pm 50$ ns (4 samples) time stamping

### Operating Temperature

32°F to 122°F (0°C to 50°C)

### Weight

Net, 0.69 lbs. (0.31 kg)

### Size

7.63" x 3.19" x 1.19" (194mm x 81mm x 30mm)