



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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BB60D Real-Time Spectrum Analyzer

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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)