Signal Hound®

SA44B Real-Time Spectrum Analyzer

Signal Hound designs and builds powerful, affordable spectrum analyzers and signal generators for engineers, operators and RF professionals around the globe.

ACROSS A WIDE RANGE OF INDUSTRY AND SPECIALIZED APPLICATIONS, HIGH-QUALITY SPECTRUM ANALYSIS HAS BECOME A GO ANYWHERE NECESSITY.

Signal Hound's SA44B is a Software Defined Receiver (SDR) optimized as a narrow-band real-time RF spectrum analyzer. It is a compact, simple to use, effective troubleshooting tool for the general lab user, engineering students, and ham radio enthusiast. The SA44B is a USB-powered, 1 Hz to 4.4 GHz spectrum analyzer and measuring receiver that has the sensitivity, accuracy, and dynamic range expected in a unit many times its cost. It is powered from the USB cable, eliminating the need for a separate power supply. Measuring less than 8 inches long and weighing only 10 ounces, the SA44B can be used virtually anywhere!

APPLICATIONS

- General Purpose RF Test & Measurement
- Manufacturing Test
- Interference Monitoring
- Antenna Peaking
- AM/FM/SSB/CW demodulation
- Scalar Network Analysis: When paired with Signal Hound's TG44A Tracking Generator

FEATURES

- RF Frequency Range: 1 Hz to 4.4 GHz
- Wide dynamic range: -151 dBm to +10 dBm
- Resolution bandwidths of 0.1 Hz to 250 KHz and 5 MHz
- Includes a High Dynamic Range Measuring Receiver
- I/Q Data up to a 240 KHz bandwidth
- Frequency Sweeps up to 140 MHz per second

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SA44B Real-Time Spectrum Analyzer & Measuring Receiver

May 2023

Production Specifications

Frequency Range	1 kHz to 4.4 GHz		
Resolution Bandwidth	0.1 Hz to 250 kHz and 5 MHz		
Displayed Average Noise Level (DANL) (dBm/Hz with 0dB input attenuation)	Input Frequency Range	RF Preamp Off	RF Preamp On
	• 10 Hz	-124 dBm	N/A
	• 100 Hz to 10 kHz	-135 dBm	N/A
	• 10 kHz to 500 kHz	-142 dBm	N/A
	• 500 kHz to 10 MHz	-142 dBm	-153 dBm
	• 10 MHz to 100 MHz	-148 dBm	-161 dBm
	• 100 MHz to 1 GHz	-144 dBm	-158 dBm
	• 1 GHz to 2.6 GHz	-139 dBm	-151 dBm
	• 2.6 GHz to 3.3 GHz	-135 dBm	-151 dBm
	• 3.3 GHz to 4.4 GHz	-128 dBm	-134 dBm
Internal Frequency Reference Accuracy	± 1 ppm (standard); 0.1 ppm (option-1)		
Counter Accuracy	± (1Hz + timebase error)		
Amplitude	Range: +10 dBm to Dispalyed Average Noise Level (DANL) Absolute Accuracy • ± 1.5 dB (0 dBm to DANL) • ± 2.0 dB (+10 dBm to >0 dBm)		
Measuring receiver	• Operating Frequency: 150 kHz to 4.4 GHz • FM Accuracy ± 1% typical • AM Accuracy ± 1% typical • Synchronous Level Detector ± 0.25 dBc (0 dBm to -125 dBm) • 150 kHz to 1 GHz • 0 dBm to -115 dBm • 1 GHz to 4.4 GHz		
Operating Temperature	Standard (passive cooling) 32°F to 158°F		
Size and Weight	• 7.65” x 3.18” x 1.18” (194mm x 80mm x 30mm) • .74 lbs. (0.33 kg)		
Power Consumption	• 2 Watts (typ)		
Interface	USB 2.0		
System Requirements	Windows Operating System		

Ordering Options
Standard, Temperature Range 32°F to 122°F (0°C to 50°C)
Option 1, Temperature Range -40°F to 185°F (-40°C to -85°C)