

# USB-SA44B Spectrum Analyzer

1 Hz to 4.4 GHz



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The perfect tool for general field and lab use, electronic engineering students, ham radio enthusiasts, and electronic hobbyists alike

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Now with real-time mode for spans of 250 kHz or less

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Write automated testing and/or data collection applications with included API that is Windows®-based and Matlab®/LabVIEW® compatible

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Phase noise, harmonics, and modulation measurement utilities included

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Use over the entire operating temperature range with full accuracy. Standard temperature range of 0°C to +70°C and optional extended temperature range of -40°C to +85°C

# USB-SA44B Spectrum Analyzer/Measuring Receiver

4 March 2021    **NSN** 6625-01-615-6469 (Standard) • 6625-01-608-8783 (Option 1)

## FREQUENCY

Frequency Range: 1Hz to 4.4GHz (RF Preamp Off); 500kHz to 4.4GHz (RF Preamp On)

Internal Frequency Reference Accuracy:  $\pm 1$  ppm

Counter Accuracy:  $\pm$  (1Hz + timebase error)

Resolution Bandwidth: 0.1Hz to 250kHz and 5MHz

## AMPLITUDE

- Range: +10dBm to Displayed Average Noise Level (DANL)
- Absolute Accuracy:  $\pm 1.5$ dB (0dBm to DANL);  $\pm 2.0$ dB (+10dBm to >0dBm)

Displayed Average Noise Level (dBm/Hz with 0dB input attenuation):

FREQUENCY	RF PREAMP OFF	RF PREAMP ON
10Hz	-124 dBm	NA
100Hz to 10kHz	-135 dBm	NA
10KHz to 500kHz	-142 dBm	NA
500kHz to 10MHz	-142 dBm	-153 dBm
10MHz to 100MHz	-148 dBm	-161 dBm
100MHz to 1GHz	-144 dBm	-158 dBm
1GHz to 2.6GHz	-139 dBm	-151 dBm
2.6GHz to 3.3GHz	-135 dBm	-151 dBm
3.3GHz to 4.4GHz	-128 dBm	-134 dBm

## MEASURING RECEIVER

- Operating Frequency 150kHz to 4.4GHz
- FM Accuracy  $\pm 1\%$  typical
- AM Accuracy  $\pm 1\%$  typical
- Synchronous Level Detector  $\pm 0.25$ dBc ([0dBm to -125dBm, 150kHz to 1GHz] and [0dBm to -115dBm, 1GHz to 4.4GHz])

**CALIBRATION INTERVAL** 1-year

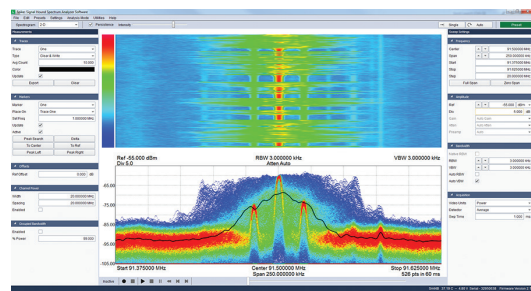
## OPERATING TEMPERATURE

- 0°C to +70°C (Standard); -40°C to +85°C (Option-1)



The Signal Hound USB-SA44B is a USB-powered, 1Hz to 4.4GHz, economy spectrum analyzer and measuring receiver. The Signal Hound SA44B has the sensitivity, accuracy, and dynamic range you'd expect in a unit many times its cost. The Signal Hound SA44B 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 Signal Hound SA44B can be used virtually anywhere!

Signal Hound's Spike™ software allows the SA44B to function as a real-time spectrum analyzer (RTSA), using its real-time mode, for sweeps of 250 kHz and less—that means every RF event will be captured when using spans that are  $\leq 250$  kHz. Graphics include color persistence and a 2D waterfall display.



## SYSTEM REQUIREMENTS

Signal Hound's Spike™ software is compatible with Windows® 7, 8, and 10 operating systems. You must have at least 200MB of free disc space, 4GB of RAM, one USB 2.0 port, and a minimum of an Intel® Atom™ N2600 or Intel® Core™ i3 processor.