

The **RF** Experts

SIGNALHAWK™ Handheld Spectrum Analyzers



SH-60S-AOA, SH-75S-AOA

Defeat RF Interference

Get rid of interference and locate signal sources quickly with the SignalHawk AOA. With a frequency range of up to 7.5 GHz, GPS location tracking & signal strength vectoring, you can easily triangulate the position of interfering signals on digital maps.

Our advanced analysis technology allows you to detect Electromagnetic interference (EMI), Radio frequency interference (RFI), and adjacent channel interference quickly and accurately, so you can take the necessary steps to reduce interference and achieve optimal performance.

This easy-to-use, portable AOA device is designed to locate interference quickly and accurately, allowing you to pinpoint the source of disruption in remote locations. With SignalHawk AOA it's easier than ever before to keep your systems running smoothly and your communication uninterrupted.

3
YEAR
Warranty

PRODUCT FEATURES

- Leverages mapping technology from OpenStreetMap allowing users to triangulate the source.
- Two level internal preamplifier.
- View the spectrum with trace display, spectrogram display, or both.
- Easy-to-use, intuitive menus with multi-touch operation.
- More than 2x faster sweep times than the competition with multi-touch technology.
- High-resolution, full-color display for indoor and outdoor viewing.
- Includes the Bird RF Meter App for interoperability with a wide range of Bird Field sensors.



PREDEFINED MEASUREMENTS

- Channel Power
- Adjacent Channel Power Ratio (ACPR)
- Phase Noise
- N dB Down Bandwidth
- Occupied Bandwidth (OBW)
- Field Strength
- FM Demodulation
- CNR Loss (GNSS Signal Quality)
- Spectrum Masking and Limit Lines
- NEW! Gate Scanning with SH-75S-AOA



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Specifications

MEASUREMENT

Frequency Range SH-60S-AOA SH-75S-AOA	9 kHz to 6 GHz 9 kHz to 7.5 GHz
Aging	±1 ppm
Sweep Time SH-60S-AOA SH-75S-AOA	1.1 ms to 1600 s full span, 2.69 ms to 1600 s settable zero span 1.2 ms to 1600 s full span, 3.99 ms to 1600 s settable zero span
Resolution Bandwidth	10 Hz to 5 MHz in 1, 2, 3, 5, 10 steps
Second Harmonic Distortion	1.6 GHz to 70 dBc
Third Order Intercept (TOI)	+15 dBm (-10 dBm tones, 1 MHz apart, preamp off, reference level -10 dBm)
P1 dB SH-60S-AOA SH-75S-AOA	+5 dBm nominal 0 dBm nominal
Phase Noise SH-60S-AOA SH-75S-AOA	-95 dBc/Hz, @10 kHz (typical -97 dBc/Hz), -115 dBc/Hz, @1 MHz (typical -116 dBc/Hz) -88 dBc/Hz, @10 kHz (typical -90 dBc/Hz) -115 dBc/Hz, @1 MHz (typical -116 dBc/Hz)
Measurement Range	DANL to +20 dBm
Input Attenuator Range	0 to 30 dB, 1 dB step
Max Safe Input Level	Preamp Off : +30 dBm Preamp +20 dB : 0 dBm Preamp +40 dB : -20 dBm
Reference Level Range	-140 dBm to +20 dBm, -190 dBm to +70 dBm (Ref level offset: ON)
RBW Switching Uncertainty	±0.3 dB
Input Attenuator Uncertainty	±0.6 dB
Display Average Noise Level (DANL)	Preamp Off : 1 GHz, -129 dBm/Hz (typical -132 dBm/Hz) Preamp +20 dB : 1 GHz, -149 dBm/Hz (typical -152 dBm/Hz) Preamp +40 dB : 1 GHz, -168 dBm/Hz (typical -169 dBm/Hz) (Input terminated, detector set to positive, trace average set to 1000, span set to 50 kHz, reference level of -100 dBm, all other settings auto-coupled, 23±5 °C normalized to 1 Hz RBW)
Residual Responses SH-60S-AOA SH-75S-AOA	-75 dBm -60 dBm

ACCURACY

Frequency Span Accuracy	±1%
RBW Accuracy	≥1 MHz, ±10%, <1 MHz, ±2%
Amplitude Accuracy	±1.5 dB (ATT set to 0 dB, input signal -5 to -30 dBm, detector set to positive, sensitivity set to low, RBW auto-coupled, all other settings auto-coupled, 23±5 °C. Half hour warm-up required.)

CONNECTORS

RF In	N (f)
USB	USB type C
Power Interface	Slim Tip, DC 20 V

SYSTEM

Display	5.5 inch, 1280 *720p
OS	Android
Languages	English, Chinese
Battery Type	Li-ion
Battery Operating Time	5 hours typical
Battery Charge Time	6 hours typical
Compatible With	For a complete list of compatible sensors see Bird's RF Meter page http://bit.ly/rfmeterrapp2

ENVIRONMENTAL

Operating Temperature	0 °C to 50 °C
Storage Temperature	-20 °C to 70 °C

PHYSICAL

Size	7.8 in x 3.7 in x 2.4 in (197 mm x 93 mm x 61 mm)
Weight	1.98 lb (0.9 kg)

STANDARD ACCESSORIES

Hard Carry Case	7002A218-2
Soft Carry Case	7002A219-1
AC Adapter (12Vdc Output)	SK05T-1200300Z
Stylus	SK-TP-112
USB Drive	5A2745-1
USB Adapter	SK-CONN-OTG-2
Manual	920-SH-60S, 920-SH-75S
Battery	SK-BTY-7468

birdrf.com/products

The RF Experts | USA Sales : 30303 Aurora Rd, Solon, OH 44139 | www.birdrf.com
Phone: +1 440.248.1200 / 866.695.4569 [Toll Free] | Fax: +1 440.248.5426 / 866.546.4306 [Toll Free]