



Handheld Spectrum Analyzer

SignalHawk™ SH-42S-TC

The **SignalHawk™ SH-42S-TC** is a new generation of Spectrum Analyzer that offers superb functionality in a small, very affordable package. This highly portable unit fits easily in one hand and offers the user an amazing intuitive user interface.

Built upon a smartphone platform, users will find a high-resolution touch screen with familiar, easy to use, methods for setting up and using the spectrum analyzer. Field engineers, technicians, wireless equipment manufacturers, service providers, contractors, tower erectors and military field personnel alike have come to trust the efficiency and precision results of SignalHawk.

Predefined Measurements Include:

- Channel Power measurements
- Adjacent Channel Power Ratio (ACPR)
- Phase Noise
- N dB Down bandwidth



**3-Year
Warranty**

Carry Precision and Predefined
Measurements with You.

RF Spectrum Analysis at Your Fingertips

- Priced so that you can buy one for each technician.
- Easy-to-use, intuitive menus to simplify operation for occasional or seasoned users.
- More than 2x faster sweep times than the competition.
- High-resolution, full-color display for indoor or outdoor viewing.
- Includes the Bird RF Meter App that allows interoperability with a wide range of Bird Field sensors.
- Two level Internal Preamplifier standard.
- Android operation system.
- Fully touch screen with multi-touch operation.
- Lightest, all-in-one analyzer at only 2.8 lb(1.25 kg).
- Long battery life - 6 hours battery operation time.

Handheld Spectrum Analyzer

SignalHawk™ SH-42S-TC

SPECIFICATION

Frequency Range	10 MHz to 4.2 GHz
Frequency Span Accuracy	±1%
Aging	±1 ppm
Sweep Time	1.1 ms to 1600 s Full Span 2.69 ms to 1600 s Settable Zero Span
Resolution Bandwidth	10 Hz to 5 MHz in 1, 2, 3, 5, 10 Steps
RBW Accuracy	≥1 MHz, ±10% <1 MHz, ±2%
Second harmonic distortion	1.6 GHz -70 dBc
Third-Order Intercept (TOI)	+15 dBm (-10 dBm tones, 1 MHz apart, Sensitivity LOW, Reference Level -10 dBm)
P1dB	+5 dBm Nominal
Phase Noise (1GHz)	-96 dBc/Hz, @10 kHz (typical -98 dBc/Hz) -118 dBc/Hz, @1 MHz (typical -120 dBc/Hz)
Compatible With	For a complete list of compatible sensors see Bird's Rf Meter Page http://bit.ly/rfmetrapp2
Measurement Range	DANL to +20 dBm
Input Attenuator Range	0 to 30 dB, 1 dB step
Max Safe Input Level	
Preamp Off	+20 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)
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.)
Switching Uncertainty	±0.3 dB
Input Attenuator Uncertainty	±0.6 dB
Reference Level Accuracy	≥ -60 dBm, ±0.8 dB

Display Average Noise Level (DANL)

Preamp Off	1 GHz, -131 dBm/Hz (typical -133 dBm/Hz)
Preamp +20 dB	1 GHz, -151 dBm/Hz (typical -153 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

Connectors

RF In	N (f)
USB	USB type C
Power Interface	Slim Tip, DC20V

Display

5.5 inch, 1280 *720p

OS

Android

Languages

English, Chinese

Battery Type

Li-ion

Battery Operating Time

6 hours typical

Battery Charge Time

2.5 hours typical

Operating Temperature

0°C to 50°C

Storage Temperature

-20°C to 70°C

Size

7.8 x 3.9 x 2.6 inches (200 x 99 x 67 mm)

Weight

2.8 lb (1.25 kg)

STANDARD ACCESSORIES

Hard Carrying Case	SPM-AS007
Soft Carrying Case	SPM-AS008
AC Power Adapter	SPM-AS001
AC Power cable (US standard)	SPM-AS003
USB Cable	SPM-AS004
USB OTG Cable	SPM-AS005
Touch Pen	SPM-AS006
USB Drive	SPM-AS009
Manual	920-SH-42S
Battery	SPM-021

OPTIONAL ACCESSORIES

5A5002-6	International Adapter
-----------------	-----------------------

For More Information: Vicom Australia

1064 Centre Rd
Oakleigh South Vic 3167
Australia
1300 360 251
info@vicom.com.au
www.vicom.com.au



Vicom New Zealand

Grd Floor, 60 Grafton Road
Auckland 1010
New Zealand
+64 9 379 4596
info@vicom.co.nz
www.vicom.co.nz



The RF Experts • 30303 Aurora Rd. • Solon, OH 44139 • 866.695.4569 • www.birdrf.com

Bird is not responsible for omissions or errors. Specifications subject to change without notice.

analyzer-signalhawk-SH42S-TC-09162019

