

Signal Hawk

Spectrum Analyzer (100KHz to 3.6GHz) Vector Network Analyzer (325MHz to 3.6GHz)

The **Signal Hawk** is the most friendly test solution for installation, maintenance and defect removal in the most various segments of communication through RF, in which is necessary a spectrum analysis. Technicians and engineers from the field can trust in this portable and robust tool to execute its tasks in a fast and efficient manner.



- Easy operation
- Fast, precise and sensible, with noise floor of -135 dBm.
- Colored high resolution display, allowing easy visualization in bench or under direct sun-light, when operated in field.
- Intuitive easy to use menus, instant configuration buttons and integrated help files. Eliminating, in this way, the need of printed manuals.
- Robust construction, compatible with military and European standards, making it resistant to falls.
- Rechargeable Lithium long life batteries, enabling continuous operation for 5,5 hours, and easily replaceable in field when needed.
- The easiness from USB connectivity allows the storage of more than 90,000 traces.
- Windows CE® operating system based, thus having the features of a portable computer.
- Possible applications : Cellular, PCS, DCS, 2 G, 3G, 4G, CDMA, cdmaOne, CDMA 2000, 1x, 1x EV-DO, GSM, GPRS, EDGE, UMTS, HSDPA, W-CDMA, TDMA, AMPS as well as 802.11, Bluetooth, Broadcast, Emergency, Fire, GPS, HDTV, IBOC, In-Building, Microwave, NPSPAC, Paging, Police, Private, Project 25, Public Safety, Tactical Military, Telematics, Tetra, Trunking, Utilities, WLAN and WLL
- **Optional Power Meter functionality:** **Signal Hawk** is compatible with sensors models 5012A, 5016, 5017, 5018, 5019, 5011, 5011-EF e 5010B. These sensors provide $\pm 5\%$ (± 0.2 dB) precision for Forward Average Power. Other measurements include Reflected Power, VSWR, Return Loss, Peak Power, Average Burst Power, Crest Factor, and CCDF.
- **Spectrum Analyzer:** Measures carrier signals and interferers. Configurable amplitude, frequency and markers. Displays and stores traces.
- **Vector Network Analyzer (VNA), 1-port:** Measures Impedance Matching, VSWR, RL dB, Rho, Eff %, Reflected %, DTF (cable test, Distance to Fault up to 450m with 4cm resolution), cable losses, includes extensive editable list of cable models
- **Vector Network Analyzer (VNA), 2-port:** Same capabilities as the 1-port VNA, plus Gain and Insertion Loss measurements (-90 to +50dB) for components with input/output. Internal Bias Tee configurable for 12 or 24V. (see Models table for each model's available functionalities)



www.signalhawk.com

General Specifications

Display	213,36 mm (8,4") , SVGA 800 x 600 pixels
Data points	705 displayed (12-11265 selectable for VNA)
Internal memory	300 sweeps
USB external storage	1GB, 90.000 sweeps
WIN CE plugins	Word, Excel, PPT, PDF, Image
Drop test	1 meter, EN 61010-1 standard
Transit Drop test	10 drops, MIL-PRF-28800F
CE conformance	yes
Batteries	5,5 hours, field-replaceable
USB connectivity	PC, USB storage and accessories
Dimensions	292.1 X 266.7 X 96.52 mm
Weight	3.5 kg including batteries

Spectrum Analyzer Specifications

Frequency Range	100 kHz to 3,6 GHz
Frequency Resolution	1Hz
Frequency Uncertainty	± 1 ppm
Reference Aging	± 1 ppm / year
Temperature Drift	± 1 ppm / °C
Spectral Purity	-85 dBc to 30 KHz
Sweep time	2,2 s – span total ; 1 ms – span zero
Resolution BW	RBW from 100 Hz to 1 MHz
Video BW	VBW form 10 Hz to 300 kHz
Amplitude Precision	± 1.0 dB typical, $\pm 1,5$ dBs maximum
Amplitude dynamic range	66 dB intermod free
Noise Floor	-135 dBm DANL
Attenuator	0, 10, 20 or 30 dB (internal)
Pre-amplifier	+ 24 dB gain (internal)

Vector Network Analyzer (VNA) Specifications

Frequency Range	325MHz to 3.6GHz
Frequency Resolution	40kHz
Frequency Uncertainty	± 2 ppm
IFBW	100Hz to 1MHz , 1, 3 and 10 steps
Directivity	-42dB calibrated
Calibration	OSL, by freq., output, points (705)
Interference Immunity	> 13dBm
RF output	-40 to +10dBm, 1dB steps

Model	SH-36S	SH-362	SH-361S	SH-362S
Spectrum Analyzer	•		•	•
VNA 1-port			•	
VNA 2-port		•		•
Part #	35236	42899	40704	42900

PC-Based and Rack Mounted models

The PC-based (SH-36S-PC) and Rack Mounted (SH-36S-RM) models do not include a display nor a keyboard. All operations are made via a PC connected to the unit via USB. The PC-Based model is a highly portable unit, and the Rack Mounted is designed for fixed installations in a rack.

Model	SH-36S-PC	SH-36S-RM
Spectrum Analyzer	•	•
VNA 1-port		
VNA 2-port		
Part #	43018	43019



SH-36S-PC



SH-36S-RM