

# Bird<sup>®</sup> PC SignalHawk<sup>™</sup> Spectrum Analyzer

Model SH-36S-PC: 100kHz to 3.6 GHz

Analyzes the radio frequency spectrum. Measures intended and interfering signals, allows setup of parameters such as frequency and amplitude markers. Also, displays signal amplitude vs. frequency and saves traces on your PC.

High Performance in a PC Module Spectrum Analyzer:

- Fast, Accurate, and Sensitive: -135 dBm Noise Floor.
- Same "Spectrum Analyzer" functionality as our hand held and rack mount units but in a convenient model.
- Built in FCC Compliance Masks.
- Waterfall display.
- Sophisticated Spectrum Analysis software package included with the product.
- Ideal solution for field techs who already carry a laptop with them as standard equipment.

## PROBLEMS

Need to verify FCC compliance

Overloaded with equipment

Tight budgets

## SOLUTIONS

View emissions mask from your desk

Module streamlined to minimize package size

Buy only what you need with this dedicated Spectrum Analyzer module



## APPLICATIONS

Signals measured: Cellular, PCS, DCS, 2G, 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, Lab, Microwave, NPSPAC, Paging, Police, Private, Project 25, Public Safety, Tactical Military, Telematics, Tetra, Trunking, Utilities, WiMAX, WLAN and WLL.

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## SPECIFICATIONS

|                           |   |
|---------------------------|---|
| Frequency Range           | 100 kHz to 3.6 GHz  |
| Frequency Resolution      | 1 Hz  |
| Frequency Uncertainty     | ± 1 ppm   |
| Reference Aging           | ± 1 ppm / year  |
| Temperature Drift         | ± 1 ppm / °C  |
| Spectral Purity           | -85 dBc @ 30 kHz  |
| Sweep Time                | 2 s, full span; 1 ms, zero span                               |
| Resolution Bandwidth      | 100 Hz to 1 MHz RBW   |
| Video Bandwidth           | 10 Hz to 300 kHz VBW  |
| Amplitude Accuracy        | ± 1.0 dB typ, ± 1.5 dB max                                    |
| 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   |
| Data Points               | 705 displayed (settable)                                      |
| Single Button Measurement | Occ BW, Channel Power, ACPR, Field Strength, AM/FM Demod, C/I |
| Transit Drop Test         | 10 drops per MIL-PRF-28800F                                   |
| CE Compliant              | YES   |
| RF Input, N(F)            | +20 dBm (100 mW) max  |
| Connectivity              | USB 2.0   |
| Operating & Store Temp    | 0° to 50°C oper; -20° to +80°C st                             |
| Humidity & Altitude       | 95% humidity; 4600 m altitude                                 |
| Size and Weight           | 7.5" x 7.0" x 3.0", 3.5 lbs                                   |
| Emissions Mask            | IBOC, Analog FM, DTV and many others                          |

## STANDARD ACCESSORIES

|                  |  |
|------------------|--|
| 920-SH36S-PC-OPS | Operators Manual                           |
| 920-SH36S-PC-REF | Start-Up Instructions                      |
| 5A2653-10        | USB Cable, 10 ft, USB A (M) to USB B (M)   |
| 5A2436           | AC Adapter/Charger                         |
| 5A2238-2         | Car Adapter/Charger                        |
| 5B2431           | Internal Li-Ion Battery, Field Replacement |
| 7002A144-1       | PC Tool Software and Manual CD's           |

## OPTIONAL ACCESSORIES

|               |   |
|---------------|---|
| 920-7002A300  | Reference Manual                                  |
| ANT-100       | Field Strength Antenna, 136 to 221 MHz, SMA(M)*   |
| ANT-400       | Field Strength Antenna, 400 to 512 MHz, SMA(M)*   |
| ANT-800       | Field Strength Antenna, 824 to 894 MHz, SMA(M)*   |
| ANT-900       | Field Strength Antenna, 890 to 960 MHz, SMA(M)*   |
| ANT-1800      | Field Strength Antenna, 1710 to 1880 MHz, SMA(M)* |
| ANT-1900      | Field Strength Antenna, 1850 to 1990 MHz, SMA(M)* |
| ANT-2400      | Field Strength Antenna, 2400 to 2500 MHz, SMA(M)* |
| 100-SA-MFN-40 | Attenuator, 100W, 40 dB, N(M) to N(F), 2.4 GHz    |
| 50-A-MFN-30   | Attenuator, 50W, 30 dB, N(M) to N(F), 4 GHz       |
| 25-A-MFN-30   | Attenuator, 25W, 30 dB, N(M) to N(F), 4 GHz       |
| 10-A-MFN-30   | Attenuator, 10W, 30 dB, N(M) to N(F), 4 GHz       |
| 5-A-MFN-20    | Attenuator, 5W, 20 dB, N(M) to N(F), 4 GHz        |
| 2-A-MFN-20    | Attenuator, 2W, 20 dB, N(M) to N(F), 4 GHz        |

## OPTIONAL TEST CABLE AND ADAPTERS:

|              |  |
|--------------|--|
| TC-MNFN-1.5  | Test Cable, 1.5 m, N(M) to N (F)       |
| TC-MNFN-3.0  | Test Cable, 3.0 m, N(M) to N (F)       |
| TC-MNMFN-1.5 | Test Cable, 1.5 m, N(M) to N (M)       |
| TC-MNMFN-3.0 | Test Cable, 3.0 m, N(M) to N (M)       |
| TC-MNFE-1.5  | Test Cable, 1.5 m, N(M) to 7/16 DIN(F) |
| TC-MNFE-3.0  | Test Cable, 3.0 m, N(M) to 7/16 DIN(F) |
| TC-MNME-1.5  | Test Cable, 1.5 m, N(M) to 7/16 DIN(M) |
| TC-MNME-3.0  | Test Cable, 3.0 m, N(M) to 7/16 DIN(M) |
| PA-MNME      | Adapter, N(M) to 7/16 DIN(M)           |
| PA-FNME      | Adapter, N(F) to 7/16 DIN(M)           |
| PA-MNFE      | Adapter, N(M) to 7/16 DIN(F)           |
| PA-FNFE      | Adapter, N(F) to 7/16 DIN(F)           |
| 4240-550     | Adapter Kit, 7/16 DIN                  |
| 4240-500-1   | Adapter Kit, N(F) to N(F)              |
| 4240-500-6   | Adapter, N(F) to N(F)                  |
| 4240-500-10  | Adapter, N(M) to SMA(F)*               |

\*Recommend N(M) to SMA(F) Adapter Cmodel 4240-500-10) for Field Strength Antennas



**YOU'RE HEARD, LOUD AND CLEAR.**

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