

### **QUICKLY DIAGNOSE & RESOLVE COMMUNICATION SYSTEM PROBLEMS**

Bird's SiteHawk<sup>™</sup> Aviation Test Kit is the result of combining the proven antenna and cable testing functionality of the SiteHawk handheld analyzer, Bird's wideband power sensor – designed specifically to fit avionics power measurement needs, and all necessary adapters and cabling into a single rugged case. In addition, Bird's easy to use aviation testing software will allow anyone on the maintenance team to test and verify all the radio systems in your fleet.



# The **RF** Experts



## SITEHAWK-AV SPECIFICATIONS

| Frequency Range  | 1 MHz - 6000 MHz   |
|--|--|
| Frequency Accuracy   | ±2.5×10-6  |
| Frequency Resolution Setting   | 1 kHz  |
| Output Power   | -10dBm, Typical  |
| Reflect Amplitude Accuracy<br>–15 dB to 0 dB<br>–25 dB to –15 dB<br>–35 dB to –25 dB | ±0.4 dB<br>±1.5 dB<br>±4.0 dB                                      |
| Trace Noise Magnitude (IFBW 1kHz)  | 0.02 dB rms  |
| Measurement Speed  | 1ms / data point   |
| Measurement Points   | 51 to 3201   |
| Measure Bandwidth  | 100 Hz to 30kHz  |
| Temperature Stability  | 0.01 dB/°F (0.02 dB/°C)  |
| Return Loss Measurement Range<br>Resolution  | 0 dB to -60 dB<br>0.01 dB  |
| VSWR Measurement Range   | 1.0 to 65.0  |
| Cable Loss Measurement Range   | 0 dB to 30 dB  |
| DTF Range  | 0 to 5000 (ft) (0 to 1500 (m))                                     |
| Test Port Connector<br>Impedance   | N-type, Fema <b>l</b> e<br>50 ohms                                 |
| Connector  | Micro USB B, USB 2.0   |
| Dimensions (LxWxH)   | 7.7 x 3.6 x 2.4 in. (195 x 90 x 60 mm)                             |
| Weight   | 1.98 lbs. (0.9 kg)   |
| Maximum Input Voltage  | 50 V   |
| Operating Temperature  | 14° to 131° F (–10° to +55° C)                                     |
| Storage Temperature  | -40° to 176° F (-40° to +80° C)                                    |
| Battery Charging Temperature   | 32° to 95° F (0 to +35° C)   |
| Storage Compacity  | Thousands of Trace and Setups                                      |
| Immunity to Interfering Signals  | +13dBm   |
| CE<br>EMC<br>Safety  | Standard EN 61326-1:2006<br>Standard EN 71010-1:2001               |
| Battery<br>SK-4500-TC  | Lithium-ion rechargeable<br>10 Hrs Typical Operating Time          |
| Battery Charge Time  | 5 Hrs Full Charge  |
| Power Measurement  | Yes  |
| Compatible With  | For a complete list of compatible sensors see Bird's RF Meter Page |

http://bit.ly/rfmeterapp2



| Frequency Range                   | 25 MHz-1.0 GHz / 500 mW-500 Watts                             |
|-----------------------------------|---|
| Connector                         | N Female (Both)   |
| Power Supply                      |   |
| USB Port                          | Less than one low-power USB load                              |
| DC Input Connector                | 7-18 VDC at less than 0.1A                                    |
| Impedance                         | 50 Ohms (nominal)   |
| Weight                            | 1.2 lb. maximum   |
| Dimensions HxWxD<br>[inches (mm)] | 4.8" x 4.6" x 1.3"<br>(122 mm x 117 mm x 33 mm)               |
| Data Logging                      | Requires 5000-XT, VPM3 or Bird RF Meter App                   |
| Operating Temps °C(°F)            | -10° to 50°C (+14° to + 122°F)                                |
| Storage Temps °C(°F)              | -40° to + 80°C (-40° to +176°F)                               |
| Mechanical Shock & Vibration      | IAQ MIL-PRF-28800F class 3                                    |
| CE                                | EMC EN 61326-1-2006   |
| Power Range                       | 500mW - 500 Watts Avg / 1300 Watts Peak                       |
| Insertion VSWR                    | <1.05   |
| Insertion Loss                    | <0.05 dB  |
| Directivity                       | 28 dB up to 100 MHz,<br>30 dB from 100 to 1300 MHz            |
| Interface                         |   |
| DPM                               | DB9 proprietary interface                                     |
| PC Interface (1)                  | RS-232, 9600 Baud, no parity, 8 data bits,<br>1 stop bit, DB9 |
| PC Interface (2)                  | USB 2.0 Type B  |



- Includes Bird RF Meter App.
- Units cover frequency ranges of 1-6000 MHz.
- USB communication port for connection to storage device and battery charging.

# **SiteHawk Aviation Test Kit**

7003A001-4



### CALIBRATION COMBO SPECIFICATIONS

| Frequency             | DC - 6 GHz                     |
|-----------------------|--------------------------------|
| Resistance            | 50 Ohm                         |
| Average Power         | ≤ 1 W                          |
| Connectors            | N (m)                          |
| Load Return Loss      | ≤ –38 dB                       |
| Load VSWR             | ≤ 1.025                        |
| Open Phase Deviation  | ≤ ± 0.6°                       |
| Short Phase Deviation | ≤ ± 0.6°                       |
| Operating Temperature | 49° to 95° F (15° to 35° C)    |
| Storage Temperature   | -40° to 167° F (-40° to 75° C) |



### TERMINATION SPECIFICATIONS

| Power Rating                          | 25 W                            |
|---------------------------------------|---------------------------------|
| Frequency Range                       | DC - 4 GHz                      |
| VSWR DC - 1 GHz                       | 1.10:1 max.                     |
| VSWR 1 GHz - 4 GHz                    | 1.15:1 max.                     |
| Impedance                             | 50 Ohms, Nominal                |
| Temperature Range                     | -40° to +40° C (-40° to 104° F) |
|                                       |                                 |
| Product Type                          | Dry (Convection-Cooled)         |
| Product Type Operating Position       | Dry (Convection-Cooled) Any     |
| Operating Position                    |                                 |
| Operating Position                    | Any                             |
| Operating Position  Connector  Finish | Any<br>N-type, male             |



Quickly and easily connect to all of your aircraft's RF Systems to verify cables and antenna.



#### HARD CASE SPECIFICATIONS

| Exterior (L x W x D) | 15.27 x 12.13 x 6.69 (38.8 x 30.8 x 17 cm)                               |
|----------------------|--|
| Body                 | Polypropylene  |
| Temperature Range    | -40° to +99° C (-40° to 210° F)  |
| Weight Without Foam  | 4.5 lbs  |
| Certifications       | IP67, MIL-STD, 810F, 512.4, Drop Tested<br>Per MIL-STD-3010C Method 5007 |



#### **ADAPTER KIT SPECIFICATIONS**

**Exterior (L x W x D)** 6.5 x 4.63 x 1.69 (165.1 x 117.6 x 42.9 mm)

**Connectors** (1) Male, (1) Female, Type N

(1) Male, (1) Female, Type BNC (1) Male, (1) Female, Type TNC

(1) Male, (1) Female, Type UHF (1) Male, (1) Female, Type SMA

(5) 50 Ohm couplers

### STANDARD ACCESSORIES PROVIDED

| SK-TP-112      | Stylus                    |
|----------------|---------------------------|
| SK05T-1200300Z | AC Adapter (12 Vdc Ouput) |
| 5000-035       | Hard Carrying Case        |
| 4240-500-23    | Adapter, N(m) – SMA(m)    |
| 4240-500-10    | Adapter, N(m) – SMA(f)    |
| 4240-443       | Adapter, Avionics         |
| 4240-444       | Adapter, Avionics         |
| 5A2970-16-120B | RF Cable, 10 feet long    |
| 5A2745-1       | USB Drive                 |
|                |                           |

**SK-CONN-OTG-2** USB Adapter



Clearly confirm whether antenna and/or cable lines require replacement with on-screen indicators.