



MODEL 5011 TERMINATING POWER SENSOR (TPS)

The **Model 5011 Terminating Power Sensor** is designed to make precision Power Measurements with the full flexibility of a portable instrument. The Model 5011, when used along with the **Bird Model 5000-EX Digital Power Meter** or the **Bird Site Analyzer™ Series** provides customers a **TOTAL RF POWER MEASUREMENT SOLUTION** to measure Base Station Power and/or Broadcast Transmitter Power with **Accuracy** of **+/-5%** of readings.



FEATURES:

- Ease of use and portability make the 5011 (in conjunction with the 5000-EX) ideal for field use
- Fast warm up time makes the 5011 a critical tool in trouble shooting a down system
- Due to state of the art design, the 5011 can make accurate power measurements (+/- 5%) without requiring constant recalibration and at a reduced cost
- Detector provide true average power, regardless of the form of modulation
- The board power and frequency range make the unit compatible with a variety of applications.
 - Frequency from 40 MHz to 4 GHz (up to 12 GHz with EF version)
 - Power from 10 uW to 10 mW (up to 50 W with calibrated attenuators)

Plug & Play Solution:

The TPS Model 5011 plug and play solution requires only three steps for setup:

Step 1. Connect the TPS to the Model 5000-EX (DPM) or Site Analyzer Series (SA)

Step 2. Zero the TPS (20 seconds)

Step 3. Connect the TPS RF connector to the attenuator or coupler to measure power (enter the offset for the coupler or attenuator as necessary)

You are now equipped to take accurate readings of the average power of your signal.



RF Measurement and Management in Your World



MODEL 5011

TERMINATING POWER SENSOR (TPS)

NOTE: The BIRD Model 5000-EX or the Bird Site Analyzer™ Series is required.

POWER MEASUREMENT CHARACTERISTICS

Frequency Range:	40 MHz to 4 GHz
Power Measurement Range:	-20.000 to +10.000 dBm (10.000iW to 10.000mW)
Peak/Average Ratio:	12 dB maximum
Accuracy:	±5% of reading ±1mW RSS (excluding mismatch uncertainty)*
Warm Up Time:	5 Minutes
Input Impedance:	50 Ohms (nominal)
Input VSWR:	Typical 1.03 (36.6 dB return loss); maximum 1.20 (20.8 dB return loss)
Input Connector:	Precision N Male
Output Connector:	Male DB-9 to interface to Digital Power Meter or Site Analyzer
Power Supply	From host instrument via cable connection

PHYSICAL AND ENVIRONMENTAL SPECIFICATIONS

General:	Terminated average power measurement
Operating Temperature:	-10° to +50°C (+14° to +122°F)
Storage Temperature:	-40° to +80°C (-40° to +176°F)
Mechanical Shock:	IAW MIL-PRF-28800F class 3
Vibration:	IAW MIL-PRF-28800F class 3
Humidity:	95% maximum (non-condensing)
Altitude:	15,000 ft operating
Safety:	Complies with EN-61010-1:1995 including Amendment 2 IAW Low Voltage Directive (73/23/EEC)
EMC:	Complies with EN 61326-1:1997 IAW EMC Directive (89/336/EEC)
Size:	6" long (including connectors); 1.5" diameter
Weight:	3/4 lb. Maximum

* When operating below 100 MHz and above 40°C, add 1%.

Model 5011 Accessories

Part #	Description
8353A040-50	50 W Attenuator, 40 dB, N(M) to N(F)* Note: For 100 mW to 50 W TPS applications
8353A030-10	10 W Attenuator, 30 dB, N(M) to N(F)* Note: For 10 mW to 10 W TPS applications
4240-500-1	Adapter, N(F) to N(F)
4240-500-3	Adapter, N(F) to N(M) Right Angle
4240-500-4	Adapter, N(F) to SMA(F)
4240-500-5	Adapter, N(F) to SMA(M)
PA-FNME	Adapter, N(F) to 7/16 DIN(M)
PA-FNFE	Adapter, N(F) to 7/16 DIN(F)
TC-MNFN-1.5-G	Test Cable, 1.5 Meters, N(F) to N(M)
TC-MNFN-1.5	Test Cable, 1.5 Meters, N(F) to N(M), Armored, Phase-Stable
TC-MNFN-3.0	Test Cable, 3.0 Meters, N(F) to N(M), Armored, Phase-Stable
5011A035-1	DC Block
5011-CALDATA	Calibration Data for TPS Accessories Recommended for attenuators, test cables, dc block and right angle adapter

Model 5000 EX Accessories

5A2238-1	Cigarette Lighter Adapter
5000-030	Soft Carrying Case
5000-035	Hard Carrying Case

For additional accessories:

- SA-EX Series - see www.bird-electronic.com/products/pdfs/568-exseries-0305.pdf
- Model 5000-EX - see www.bird-electronic.com/model 5000 product information/brochure

Contact factory to inquire about special orders to meet your specific application needs: Visit us at www.bird-electronic.com



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