Bird Technologies®

Terminating Power Sensor

5011, 5011-EF, 5015, 5015-EF Series

The Bird Terminating Power Sensor (TPS) is the easiest to use and most cost competitive terminating sensor on the market. This one port measurement device will provide True Average Power for forward power or reflected power if attached to a directional coupler or total power in the line if connected to a non-directional coupler. The TPS is a true plug and play solution with no front panel calibration required at any time.

The TPS is truly the most economical terminating sensor, half the price of our leading competitors. Quite a value considering the TPS is a highly accurate (5%) device with calibration traceable to the National Institute of Standards and Technology (NIST). Now available in a USB compatible version.

PROBLEMS ▸ SOLUTIONS

Tight budgets
- USB connectivity, no meter required
- Complimentary Virtual Power Meter (VPM2) software

Varying field tech skill levels
- Sensor plugs and plays with 5000-XT meter

Need greater confidence in measurement
- No field calibration required
- NIST traceable calibration

APPLICATIONS

WPS measures: Analog Cellular, Digital Cellular, 3G, 4G, Tetra, APCO/P25, Trunking, CDMA, TDMA, WCDMA, GSM, Transportation, Tactical Military, Radar, Avionics, Marine, LMR, Analog Broadcast, Digital Broadcast, GSM, GPRS, EDGE, UMTS, HSDPA, Bluetooth, Fire, GPS, NPSPAC, Paging, Project 25, Public Safety, Telematics, Utilities, WIMAX and WLAN

Measurements performed: True average power.

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TPS SPECIFICATIONS

Frequency Range	**5011**	40 MHz - 4.0 GHz
	5011-EF	40 MHz - 12 GHz
	5015	40 MHz - 4.0 GHz
	5015-EF	40 MHz - 12 GHz
Power Range		-20.000 to +10.000 dBm (10.0010 µW to 10.000 mW)
Impedance		50 Ohms
Peak/Average Ratio		12 dB max.
Accuracy		± 5% of Reading. When operating below 100 MHz and above 40 °C, add 1 %
Insertion VSWR	**5011**	Typical 1.03 (36.6 dB return loss); maximum 1.20 (20.8 dB return loss)
	5011-EF	Typical 1.05 (32.3 dB return loss); maximum 1.25 (19.1 dB return loss)
	5015	Typical 1.03 (36.6 dB return loss); maximum 1.20 (20.8 dB return loss)
	5015-EF	Typical 1.05 (32.3 dB return loss); maximum 1.25 (19.1 dB return loss)
Warm Up Time		5 Minutes
Connector(s)		Precision N Male
Power Supply		From host instrument via cable connection
Interface(s)	**5011**	DB9 (Proprietary Configuration)
	5011-EF	DB9 (Proprietary Configuration)
	5015	USB 1.1 Type B
	5015-EF	USB 1.1 Type B
Weight		.75 lb. maximum
Size [inches (mm)]		6" (152 mm) long (including connector); 1.5" (38 mm) diameter
Altitude		15,000 ft. (4570 m) operating
Humidity, Max.		95% maximum (non-condensing)
Safety		Complies with Directive 2006/95/EC for Low Voltage, per EN 61010-1:2001 Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory use.
EMC		Complies with Directive 2004/108/EC Relating to Electromagnetic Compatibility, per EN 61326-1:2006 Electrical Equipment for Measurement, control, and Laboratory use.
Operating Temps [°C (°F)]		-10 to 50 (14 to 122)
Storage Temps [°C (°F)]		-40° to +80°C (-40° to +176°F)
Mechanical Shock & Vibration		MIL-PRF-28800F class 3

ACCESSORIES

8353A040-50	40 dB Attenuator, 50 W, 4 GHz
8353A030-10	30 dB Attenuator, 10 W, 4 GHz
8353A040-50-18	40 dB Attenuator, 50 W, 18 GHz
8353A030-10-18	30 dB Attenuator, 10 W, 18 GHz
4240-500-1	Adapter, N (F) to N (F)
4240-500-3	Adapter, right angle, N (F) to N (M)
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 m., N (M)/N (F) conn.
TC-MNFN-1.5	Test cable, armored, PS, 1.5 m., N (F) to N (M)
TC-MNFN-3.0	Test cable, armored, PS, 3.0 m., N (F) to N (M)
5011A035-1	DC Block, N (F) to N (M)
5A2653-6L2	USB Locking Cable, 6'
5A2653-10	USB Cable, 10'
5A2264-09-MF-10	DB9 Cable, 10'

COMPATIBLE DEVICES

5011, 5011-EF	5000-EX 5000-XT SA-1700 EXP SA-2500 EX SA-6000 EX SH-36S SH-361S SH-362 SH-362S
5015, 5015-EF	5000-XT VPM2 SA-3600 XT SA-6000 XT

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