Model 5000
Digital RF Power Meter

The "NEW"
Industry Standard
Hand-Held
RF Power Meter

EASY TO OPERATE & FIELD READY

VERSATILITY TO HANDLE ANY JOB

The **Model 5000** operates over a broader frequency range than any Bird meter produced to date, covering 2 MHz to 3600 MHz (based upon element selection*). Coupled with the ability to measure True Average Power from 1 to 1000 Watts, the **Model 5000** handles Cellular, PCS, AMPS, CDMA, GSM, TDMA, ISM, UMTS, 3G Wireless, WLL, Paging, Conventional/Trunked Radio, Aviation, Military, and Analog or Digital Audio and Television Broadcast.

READINGS ANY WAY YOU NEED THEM

The highly-visible, back-lit LCD display simultaneously shows forward and reflected power or other selected parameters in digital format, while a 20-segment analog bar graph tracks forward power readings. Display annunciators show measurement mode, units, sensor type, overrange, battery condition, and "Speed Key" functions. Readings can be expressed as Watts, dB Return Loss and % Match Efficiency. VSWR is automatically calculated from forward and reflected power for fast, convenient antenna checks.
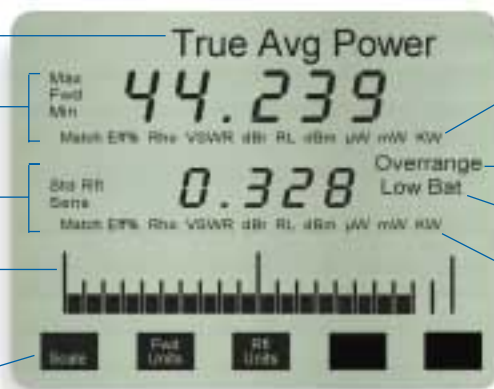
*DPM elements are available.

Serial connector to sensor facilitates hand-held operation and remote sensing

Serial connector for operation with a personal computer and Bird PC Tool software

Back-lit, high-contrast LCD

Speed Keys

Easy-to-use, calculator-like interface

Compact ergonomic case

Internal rechargeable Nickel-Metal Hydride batteries

High-Contrast Back-Lit Liquid Crystal Display

Power Measurement Mode

Major Digital Display and Annunciators

Minor Digital Display and Annunciators

Analog Bar Graph. 20 Segments; Tracks Major Digital Display

Speed Key Legends

Measurement Units for Major Digital Display (Select with Speed Key)

Overrange Indicator

Battery condition

Measurement Units for Minor Digital Display (Select with Speed Key)

RECHARGEABLE NiMH MEMORY-FREE

100 hours per charge

BIRD
Electronic Corporation
A Member of Bird Technologies Group

MODEL 5000 DIGITAL POWER METER AND MODEL 5010 THRULINE® POWER SENSOR

MODEL 5000 DIGITAL POWER METER

Display:	Back-lit liquid crystal technology, 2.25" x 3.0" (57 x 76 mm). Three-way display consisting of major and minor digital display elements, analog bar graph element, annunciators, battery indicator and speed-key legends. All display elements visible simultaneously.
Major Digital Display:	5 digits, 5/16" (7.94 mm) high. Displays Forward Power, VSWR, dBm, Return Loss, and Match Efficiency.
Minor Digital Display:	5 digits, 1/4" (6.35 mm) high. Displays Reflected Power, VSWR, dBm, Return Loss, and Match Efficiency.
Analog Bar Graph:	20 segment, horizontal orientation. Tracks major digital display.
Measurement Mode:	TRUE AVERAGE POWER, for measurement of conventional or digitally-modulated RF.
Speed Keys:	SCALE, FWD UNITS, RFL UNITS. Set full scale power range and units for major and minor displays.
Display Annunciators:	MATCH EFF%, VSWR, RETURN LOSS, dBm, µW, mW, W, kW located below major and minor displays. Display also indicates Overrange, and Low Battery.
Sensor Interface:	9-pin D-shell RS-232 serial connector. Sensor is powered from meter. Sensor is compatible with Bird VSWR Alarm products and Broadcast Power Monitor (BPM) product family.
PC Interface:	9-pin RS-232 serial port for connection to a PC.
Dimensions:	8.0"H x 4.63"W x 1.75"D (203 x 117.6 x 44.5 mm).
Weight:	1.5 lb, nominal (0.68 kg).

MODEL 5010 SENSOR

Sensor Type:	Bird THRULINE® directional dual-element line section.
Power / Frequency Range:	1 to 1000 W*, 2.0 MHz to 3600 MHz*.
Accuracy:	±5% of reading (15˚ to 35˚C), ±7% of reading (-10˚ to 50˚C).
Dynamic Range:	40:1 (E.G. 50 W element measures 1.25 W to 50 W).
Peak/Average Power Ratio:	10 dB maximum with DPM elements.
Settling Time:	< 2 seconds.
Connectors:	QC Type. Female N normally supplied.
Insertion VSWR:	1.05:1 from 0.45 to 1000 MHz (with N connectors).
Dimensions:	1.875"H x 1.875"W x 3.5"D (47.7 x 47.7 x 88.9 mm) excluding connectors.
Weight:	1.12 lb (0.51 kg).

GENERAL SPECIFICATIONS

Power Supply:	Rechargeable Nickel-Metal Hydride (NiMH) battery. Meter may be operated from AC mains using supplied adapter.
Battery Life:	100 hours, minimum, per charge.
Operating Temperature:	-10˚ to +50˚ C (Meter and Sensor).
Storage Temperature:	-40˚ to +75˚ C. (Meter and Sensor).
Humidity:	95% ± 5% max. (non-condensing).
Mechanical Shock:	MIL-T-28800D Class 3.
Vibration:	MIL-T-28800D Class 3.
Altitude:	15,000 ft. (4570 m) operating.
EMC:	Complies with directive 92/31/EEC with exceptions noted:
Emissions:	EN-55011, Class B. Immunity: EN-50082-1 at 10 V/m.
Safety:	Complies with EN-61010, IAW Council Directives 73/23/EEC and 93/68/EEC.

ACCESSORIES

Standard:	Instruction manual, serial communications cable (5010), AC charger/adapter
Optional:	Automotive power adapter, PC software tool, soft carrying case.

BIRD
Electronic Corporation
A Member of Bird Technologies Group

Preliminary specifications. Bird reserves the right to change features and specification without notice or obligation.
Meter, sensor, and plug-in elements priced separately.
* Power and frequency range based on selected plug-in elements.
Select FWD and RFL elements with a 10:1 power ratio.
Example: Select 50 W FWD element and 5 W RFL element.