

Digital Power Meter

DPM Series



- Rugged field meter tested to military standards
- Works with all Bird field sensors
- Up to 60 hours of continuous battery life
- Automatically detects sensor and displays appropriate screen
- Data logging capable with up to 7 days of onboard memory

MODEL 5000-XT

| | |
|-----------------------------|---|
| Display | Indoor/Outdoor Viewable Monochrome VGA Display with Backlight |
| Functions | VSWR, Peak Power, True Average Power, Crest Factor CCDF, Burst Power, Data Logging |
| Sensor Detection | Automatic |
| Battery | Rechargeable, Field Replaceable, Lithium Ion Batteries |
| AC Adapter/Charger | 115/230 VAC, 50/60 Hz |
| Battery Life | 20 Hours Continuous Usage with WPS Series Sensors 60 Hours Continuous Usage with All Other Sensors |
| Calibration Interval | No calibration required |
| Languages | English, Mandarin, Spanish |
| Dimensions | 6.6" H x 4.0" W x 1.95" D (168 mm x 102 mm x 50 mm) |
| Sensor Interface | DB9, USB 2.0 SeaLatch Type A |
| PC Interface | USB 2.0 SeaLatch Type B |
| Weight w/ Battery | 1.4 lbs. |
| Operating Temp. | 0°C to +50°C |
| Storage Temp. | -20°C to +50°C |
| Environmental | MIL-PRF-28800F, Class 2* |
| International Certs. | CE, RoHS |
| CE | EMC EN 61326-1:2006 |
| Compatible Devices | All Bird Field Sensors |

*contact Bird Applications Engineering for specific tests conducted

STANDARD ACCESSORIES

| | | | |
|---|------------|---|-----------------|
| Battery, Installed | 5A5001-1 | DB9 Cable, 10' | 5A2264-09-MF-10 |
| Power Supply, Includes Brick, cord, 3 Intl Adaptors | 5A5002-1 | Operations Manual , Multilanguage | 920-5000-XT |
| Cigarette adaptor | 5A2238-4 | Soft Case | 5A5000-1 |
| USB SeaLatch Cable, 6' | 5A2653-6L2 | | |

Directional Power Sensors

DPS Series



- Can measure True Average Power or Peak Power
- Available with a wide range of Bird Elements
- Every unit ships with a free Virtual Power Meter
- No field calibration required
- NIST traceable calibration



**Works with the
Bird RF Meter App!**

Free download from Google Play Store

| | 5010B | 5014 |
|-----------------------------|--|-------------------------------------|
| Frequency Range | Element dependent, 2 MHz to 2.7 GHz | |
| Power Range | Element dependent, 500 mW to 1 kW full scale | |
| Impedance | 50 Ohm | |
| Peak/Average Ratio | 10 dB maximum with DPM elements | |
| Accuracy | True Average Power, ±5% of reading (15°C to 35°C), ±7% of reading (-10°C to 50°C) PEAK POWER, ±8% of full scale | |
| Insertion VSWR | 1.05:1 from 0.45 to 1000 MHz (with N connectors) | |
| Settling Time | < 2 seconds | |
| Connectors | QC Type. Female N normally supplied. | |
| Power Supply | From host instrument via cable | |
| Interface | DB9 (proprietary configuration) | USB 2.0 (Type B) |
| Dimensions | 1.875" H x 1.875" W x 3.5" D 47.7 mm x 47.7 mm x 88.9 mm excluding connectors | |
| Weight | 1.12 lbs. (0.51 kg) | |
| Directivity | 30 dB typical (exact value depends on element selected) | |
| Humidity | 95% max. (non-condensing) | |
| Pulse Width | >100 MHz | 800 ns min. |
| Parameters | 26-99 MHz 2-25 MHz | 1.5 µs min. 15 µs min. |
| Pulse Rep. Rate Peak | 15 pps min. | |
| Pulse Duty Factor | 1 x 10 ⁻⁴ min. | |
| Dynamic Range | 16 dB | |
| Operating Temp. | -10°C to +50°C | |
| Storage Temp. | -40°C to +75°C | |
| Environmental | MIL PRM-2880F Class 2 | |
| CE | EMC EN 61326-1:2006 and Safety EN 61010-1:2001 | |
| Compatible Devices | SH-36S, SH-361S, SH-362, SH-362S, 5000-XT | SA-3600XT, SA-6000XT, 5000-XT, VPM3 |

AVERAGE POWER ELEMENT SELECTION GUIDE*

| Frequency Range (MHz) | Forward Power Range | Reflected Power Range | Forward Element | Reflected Element |
|-----------------------|--|--|--|---|
| 2 - 30 | 1.25 W to 50 W 12.5 W to 500 W | 125 mW to 5 W 1.25 W to 50 W | DPM-50H DPM-500H | DPM-5H DPM-50H |
| 25 - 60 | 1.25 W to 50 W 12.5 W to 500 W | 125 mW to 5 W 1.25 W to 50 W | DPM-50A DPM-500A | DPM-5A DPM-50A |
| 50 - 125 | 1.25 W to 50 W 12.5 W to 500 W 25 W to 1 kW | 125 mW to 5 W 1.25 W to 50 W 2.5 W to 100 W | DPM-50B DPM-500B DPM-1000B | DPM-5B DPM-50B DPM-100B |
| 100 - 250 | 1.25 W to 50 W 12.5 W to 500 W 62.5 W to 2.5 kW | 125 mW to 5 W 1.25 W to 50 W 6.25 W to 250 W | DPM-50C DPM-500C DPM-2500C | DPM-5C DPM-50C DPM-250C |
| 200 - 500 | 125 mW to 5 W 1.25 W to 50 W 12.5 W to 500 W | 12.5 mW to 500 mW 125 mW to 5 W 1.25 W to 50 W | DPM-5D DPM-50D DPM-500D | DPM-5D DPM-50D DPM-50D |
| 400 - 960 | 125 mW to 5 W 1.25 W to 50 W 2.5 W to 100 W 12.5 W to 500 W 25 W to 1 kW | 12.5 mW to 500 mW 125 mW to 5 W 250 mW to 10 W 1.25 W to 50 W 2.5 W to 100 W | DPM-5E DPM-50E DPM-100E DPM-500E DPM-1000E | DPM-5E DPM-50E DPM-10E DPM-50E DPM-100E |
| 950 - 1260 | 125 mW to 5 W 1.25 W to 50 W | 12.5 mW to 500 mW 125 mW to 5 W | DPM-5J DPM-50J | DPM-5J DPM-5J |
| 1100 - 1800 | 125 mW to 5 W 1.25 W to 50 W | 12.5 mW to 500 mW 125 mW to 5 W | DPM-5K DPM-50K | DPM-5K DPM-5K |
| 1700 - 1990 | 125 mW to 5 W 1.25 W to 50 W 12.5 W to 500 W | 12.5 mW to 500 mW 125 mW to 5 W 1.25 W to 50 W | DPM-5L1 DPM-50L1 DPM-500L1 | DPM-5L1 DPM-5L1 DPM-50L1 |
| 1900 - 2200 | 125 mW to 5 W 1.25 W to 50 W | 12.5 mW to 500 mW 125 mW to 5 W | DPM-5L2 DPM-50L2 | DPM-5L2 DPM-5L2 |
| 2200 - 2300 | 125 mW to 5 W 625 mW to 25 W | 12.5 mW to 500 mW 62.5 mW to 2.5 W | DPM-5M DPM-25M | DPM-5M DPM-25M |
| 2300 - 2500 | 125 mW to 5 W | 12.5 mW to 500 mW | DPM-5N | DPM-5N |
| 2500 - 2700 | 125 mW to 5 W | 12.5 mW to 500 mW | DPM-5R | DPM-5R |

* Note: For Peak Power Readings, use elements from Tables 1-6 on pages 44-45