



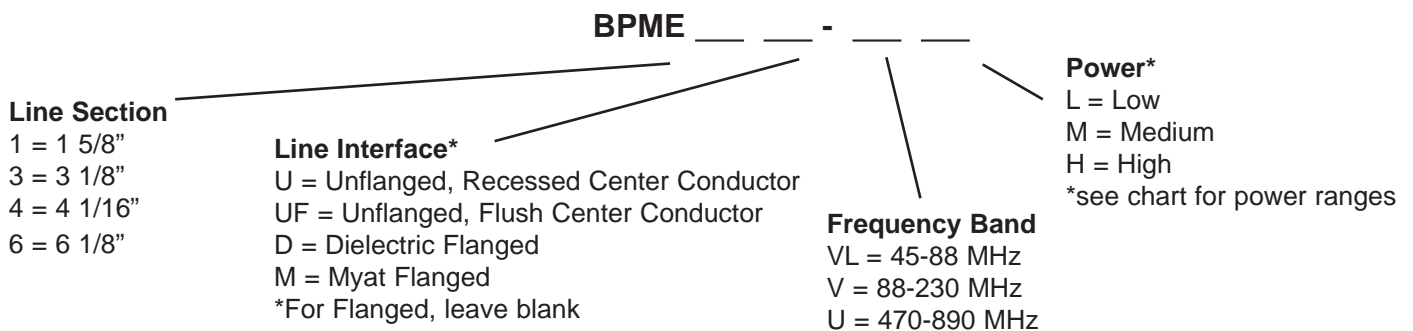
# BIRD® BPME SERIES

## BROADCAST POWER MONITORS FOR DIGITAL AND ANALOG APPLICATIONS

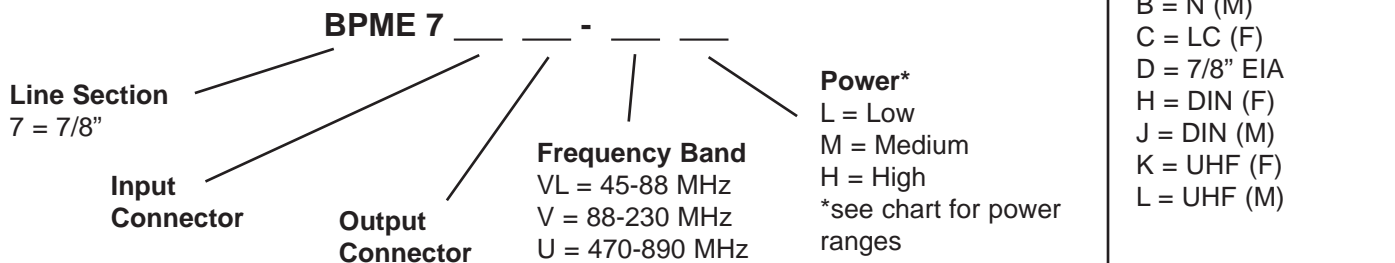
- Accurately measures power in digitally modulated and multi-carrier systems
- VSWR, return loss and match efficiency calculations using hardware or PC-based software displays
- Remote access (monitoring and control) via serial and ethernet interfaces
- Datalog function records critical parameters to facilitate preventive maintenance of your system
- 3rd Socket integral for use with an optional sampler, perfect for applications like IBOC where spectral emissions performance is mandated
- $\pm 5\%$  of reading accuracy for power;  $\pm 10\%$  for VSWR
- Handles peak to average ratio of greater than 10 dB
- 7/8", 1 5/8", 3 1/8", 4 1/16", and 6 1/8" 50 ohm line section sensors for use with industry-standard rigid transmission lines. Contact factory for sizes not listed
- Alarms on low forward power, high forward power, and high VSWR protect the transmitter and can contact personnel to minimize downtime.



### MODEL NOMENCLATURE (1 5/8", 3 1/8", 4 1/16", and 6 1/8" Line Sections)



### MODEL NOMENCLATURE (7/8" Line Sections)



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# BROADCAST POWER MONITOR

## BIRD® BPME SPECIFICATIONS

### BPME OPERATING CHARACTERISTICS

|                               |  |
|-------------------------------|--|
| Frequency Range               | See tables below   |
| Forward/Reflected Power Range | See tables below   |
| Measurement Type              | In-Line, True Average Power  |
| Peak/Average Ratio            | 10 dB  |
| Coupler Directivity           | 26 dB min., 30 dB typical  |
| Accuracy                      | ±5% of reading   |
| Dynamic Power Range           | 20 dB  |
| Alarms                        | VSWR<br>No/Low Forward Power<br>High Forward Power<br>SPDT relay contact   |
| Outputs                       | BPME PC Software, 3129<br>Ethernet 10BASE-T or 100BASE-TX<br>(auto-sensing)<br>Ethernet Version 2.0/IEEE 802.3<br>Protocols: ARP, UDP/IP, TCP/IP, Telnet, ICMP,<br>SNMP, DHCP, BOOTP, TFTP, Auto IP, and<br>HTTP<br>Security: 256-bit encryption |
| Display Options               |  |
| Remote Interface              | Serial RS-232, 9600 baud, no parity, 8 data<br>bits, 1 stop bit, no handshake  |

### MODEL 3129 DIGITAL DISPLAY

|                   |  |
|-------------------|--|
| Operating Voltage | 115/230 VAC @ 50/60 Hz   |
| Operating Power   | Less than 10 watts   |
| Dimensions        | 5.25" x 19" x 1.75"<br>(133.35 mm x 483 mm x 44.5 mm)  |
| Weight            | Approximately 2 lbs. (0.85 kg)   |
| Supplied with     | 50 feet of cable to connect RS-232<br>and serial ports between 3129 and<br>line section, and serial interface<br>cable |

### LINE SECTION

|                       |                                 |
|-----------------------|---------------------------------|
| Operating Temperature | -10° to +50° C (14° to 122° F)  |
| Storage Temperature   | -40° to +80° C (-40° to 176° F) |
| Humidity              | 95% ±5% max. (noncondensing)    |
| Altitude              | up to 10,000 feet (3048 m)      |
| Calibration cycle     | Annual                          |

| Line Size | VHF (45-230 MHz)      |   | UHF (470-890 MHz)     |   |
|-----------|-----------------------|---|-----------------------|---|
|           | Power Designator      | Forward Power Range                     | Power Designator      | Forward/Reflected Power                     |
| 1 5/8"    | Low<br>Medium<br>High | 200 W - 2 kW<br>2 - 8 kW<br>8 - 20 kW   | Low<br>Medium<br>High | 50 - 500 W<br>500 W - 2 kW<br>2 - 5 kW      |
| 3 1/8"    | Low<br>Medium<br>High | 500 W - 5 kW<br>5 - 20 kW<br>20 - 50 kW | Low<br>Medium<br>High | 250 W - 2.5 kW<br>2.5 - 10 kW<br>10 - 25 kW |
| 4 1/16"   | Low<br>Medium<br>High | 1 - 10 kW<br>10 - 40 kW<br>4 - 100 kW   | Low<br>Medium<br>High | 400 W - 4 kW<br>4 - 15 kW<br>15 - 40 kW     |
| 6 1/8"    | Low<br>Medium<br>High | 2 - 20 kW<br>20 - 80 kW<br>80 - 200 kW  | Low<br>Medium<br>High | 800 W - 8 kW<br>8 - 30 kW<br>30 - 75 kW     |
| 7/8"      | Low<br>Medium<br>High | 50 - 500 W<br>500 W - 2 kW<br>2 - 5 kW  | Low<br>Medium<br>High | 25 - 250 W<br>250 W - 1 kW<br>1 - 2.5 kW    |



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