

Bird® BPME SERIES

Broadcast Power Monitors for Digital and Analog Applications

The Bird Broadcast Power Monitor accurately monitors RF power and VSWR continuously, provides the ability to set alarms for important power and VSWR thresholds and enables data logging for a wide range of frequencies and power levels.

The enhanced functionality of the BPME puts complete analog and digital broadcast monitoring at the user's fingertips through user-friendly, around-the-clock, remote access from any web-enabled device. In addition, the new RF test port enables users to verify spectral compliance for applications such as IBOC or HDTV at the point in the transmission line where it matters most!

PROBLEMS

Need to monitor complex (digital), high-power RF transmission

Need accurate measurements

Want to monitor system performance at large distances

Need to log data to meet government regulations

Need test port for spectrum analysis

Alarms required

SOLUTIONS

Measures power in digitally modulated and multi-carrier systems

±5% of reading accuracy for power

Remote access (monitoring and control) via serial and Ethernet interfaces

Datalog function records critical parameters

3rd Socket integral for use with an optional sampler

Alarms on high/low forward power and high VSWR



REMOTE INTERFACE

Ethernet 10BASE-T or 100BASE-TX (auto-sensing)

Ethernet Version 2.0/IEEE 802.3

Protocols: ARP, UDP/IP, TCP/IP, Telnet, ICMP, SNMP, DHCP, BOOTP, TFTP, Auto IP, and HTTP

Security: 256-bit encryption

Serial RS-232, 9600 baud, no parity, 8 data bits, 1 stop bit, no handshake

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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 No/Low Forward Power High Forward Power
Outputs	SPDT relay contact
Display Options	BPME PC Software, 3129 1RU Display

GENERAL SPECIFICATIONS

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

FORWARD POWER RANGE

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

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

BPME

Line Section	Line Interface*	Frequency Band	Power*
1 = 1 5/8"	U = Unflanged, Recessed	VL = 45-88 MHz	L = Low
3 = 3 1/8"	Center Conductor	V = 88-230 MHz	M = Medium
4 = 4 1/16"	UF = Unflanged, Flush	U = 470-890 MHz	H = High
6 = 6 1/8"	Center Conductor		*see chart for power ranges
	D = Dielectric Flanged		
	M = Myat Flanged		
	*For Flanged, leave blank		

MODEL NOMENCLATURE (7/8" Line Sections)

BPME

7

Line Section	Input Connector	Output Connector	Frequency Band	Power*
7 = 7/8"			VL = 45-88 MHz	L = Low
			V = 88-230 MHz	M = Medium
			U = 470-890 MHz	H = High
				*see chart for power ranges

CONNECTOR OPTIONS

A = N (F)	C = LC (F)	H = DIN (F)	K = UHF (F)
B = N (M)	D = 7/6" EIA	J = DIN (M)	L = UHF (M)



YOU'RE HEARD, LOUD AND CLEAR.

30303 Aurora Rd. :: Solon, OH 44139 :: 866.695.4569 :: www.bird-technologies.com