The Model PM2003 is a three channel high performance power meter that features high speed measurement capability and wide dynamic range.

**SPECIFICATIONS**

**FREQUENCY RANGE** .................................................... 10kHz-40GHz, power head dependent

**POWER MEASUREMENT RANGE** ..................................... -70dBm to +44dBm, power head dependent

**NUMBER OF CHANNELS** .............................................. Three (2 simultaneously viewable)

**MEASUREMENT SPEED** .............................................

1 channel: 200 readings/sec.
2 channels: 100 readings/sec.

**POWER HEADS** .......................................................... Select from a large number of diode and thermocouple Power Heads. The linearity and frequency calibration factors for the heads are provided in an EEPROM contained in a Head Data Adapter shipped with the Power Head.

**DYNAMIC RANGE** ..................................................... Up to 90dB with diode heads, 50dB with thermocouple heads. See Power Head Specifications.

**INPUTS** ................................................................. Rear panel HEAD connectors and rear panel IEEE-488 connector standard.

**OUTPUTS** ............................................................... Rear panel PWR/REF connector, 0dBm, 50MHz.
Rear panel RECORDER BNC connector, 0 to 10V into 1MΩ.
Output impedance is 9.09kΩ. May be operated into 1kΩ or 1V fs.

**EMULATION** .......................................................... HP437, HP438 and Boonton 4230, SCPI

**DISPLAYS** ............................................................. Menu-driven 20 character x 4 line LCD display. Simultaneous display of dual channels with bar graph proportional to data display.

**DISPLAY UNITS** ..................................................... Absolute, watts and dBm. Relative, dBr

**DISPLAY RESOLUTION** ........................................... 5 digits, nW, μW, mW and W; 4 digits dBm

**MEASUREMENT ACCURACY** ...................................... Total accuracy is the sum of the following uncertainties: (errors are ± worst case).

**INSTRUMENTATION ACCURACY** ................................. 0.23% of full scale. 0.46% of 1/10 full scale

**POWER REFERENCE UNCERTAINTY**

Output Frequency: ................................................................ 50MHz ±0.005%.
Output Level: ...................................................................... -60 to +20 dBm
Resolution ........................................................................ 0.1 dB steps
Accuracy, 0°-20°C, NIST Traceable ......................................
At 0 dBm ±0.055 dB (1.27%)
+20 to -39 dBm ±0.075 dB (1.74%)
-40 to -60 dBm ±0.105 dB (2.45%)
Source Impedance: .......................................................... 50 ± 1 ohm. SWR: <1.05
Harmonic Output: .......................................................... <50dBc.

**OTHER UNCERTAINTIES** ........................................... For Head, Noise, High Frequency Calibration Uncertainty See Power Head Specifications

**CALIBRATION FACTORS** ............................................. +3dB to -3dB in 0.01dB steps. These calibration factors are stored in non-volatile memory. When a frequency other than that stored is used, the meter linearity interpolates between the calibration factor above and below the frequency entered to obtain a calibration factor.
SPECIFICATIONS, MODEL PM2003

RING .................................................................Automatic or Manual
FILTERING ..........................................................Filter times in 0.05 second intervals to 20 seconds.
ZEROING ..........................................................Automatic function to calculate, store and apply zero corrections to each range
DISPLAY OFFSET ..............................................-99.99 to 99.99 in 0.01dB steps (dBr)
POWER CONSUMPTION ......................................90 to 260 VAC (±10%), 47-63Hz, 24 VA maximum
OPERATING TEMPERATURE .................................0° to +55°C
WEIGHT ..........................................................4.9 lbs (2.2 kg)
DIMENSIONS ...................................................8.25 in (21.0 cm) wide, 3.5 in (8.9 cm) high, 13.5 in (34.3 cm) deep
INTERFACES ..................................................IEEE-488 and RS-232
ACCESSORIES REQUIRED .................................One or more of the available power heads and a 5 ft. power head cable (supplied with each head ordered) are both required. See PH2000 Specification Sheet.
ACCESSORIES AVAILABLE: .............................RM2000 19” Rack Mount Kit
EXPORT CLASSIFICATION .................................EAR99