

SERIES 300/400

Fiber Optic Power Monitors for Polarization Maintaining Fiber



EigenLight's PM Series 300 Fiber Optic Power Monitors and Series 400 Fiber Optic Power Monitor Attenuators are used for in-line monitoring of optical power in polarization maintaining fiber. Featuring high extinction ratio and low insertion loss, these devices allow convenient measurement of optical power in live fiber optic systems and test sets. Series 400 Power Monitor-Attenuators include an integral variable attenuator for fingertip control of optical power levels.

FEATURES

- Extinction Ratio > 23 dB
- Absolute or relative power readout
- Typical battery life 3 years
- Auto Power On/Off (Light activated)
- Dual LCD displays for easy viewing
- 40 dB Variable attenuation (Series 400)
- Optional Analog output for datalogging
- Available fiber types: Panda 1550, 1310, 980, 850

SPECIFICATIONS

| Model ¹ | M31x | M32x | M41x | M42x |
|------------------------------------|--------------------------------------|--|---|----------------------|
| Power Range | -50 to +16 dBm | -40 to +26 dBm | -50 to +16 dBm | -40 to +20 dBm |
| Attenuator Range | N/A | N/A | 40 dB | 40 dB |
| Insertion Loss | <0.5 dB | <0.2 dB | <1.5 dB ² | <1.0 dB ² |
| Directivity ³ | >20 dB | >15 dB | >20 dB ² | >15 dB ² |
| Absolute Accuracy | +/- 0.2 dB | +/- 0.2 dB | +/- 0.2 dB | +/- 0.2 dB |
| Return Loss | >70 dB | >70 dB | >40 dB | >40 dB |
| Extinction Ratio | >23 dB | >23 dB | >18 dB | >18 dB |
| Fiber Type/ Calibration Wavelength | | x = 2: 1550 nm x = 4: 1310 nm | x = 6: 980 nm x = 8: 850 nm | |
| Wavelength Range | | x = 2: 1540-1620 nm x = 4: 1290-1380 nm | x = 6: 970-1100 nm x = 8: 800-900 nm | |
| Power | 4 Lithium Coin Cells (CR2032) | | | |
| Battery Life | 3 Years Typical (Slow Mode) | | | |
| Display Resolution | 0.1 dB | | | |
| Display Refresh Rate | 0.1 Sec/0.8 Sec (Fast/Slow Mode) | | | |
| Analog Output Voltage | 1 millivolt/dBm (0dBm = 0 millivolt) | | | |
| Analog Output Impedance | 40 kΩ | | | |
| Operating Temperature | 0°C to +40°C | | | |
| Storage Temperature | -10°C to +60°C | | | |
| Relative Humidity | <95% Non Condensing | | | |
| Size (Housing Only) | 9.5 x 3.7 x 3.6 cm | | | |
| Weight | 140 grams (5 oz.) with Batteries | | | |
| Housing Material | Flame Retardant ABS Plastic | | | |

1. x = fiber type. See Ordering Information

2. At minimum attenuator setting.

3. Sensitivity to forward directed light relative to backward directed light.

