

Inline Optical Power Monitor with LCD Display

Features / Benefits

- Real time power monitoring
- Low insertion loss
- Wide dynamic range
- Compact design
- RS232 interface
- Digital LCD display
- Analog monitoring voltage output
- Battery / +5V DC power supply

Applications

- Network monitoring
- Optical module
- FTTx testing
- Manufacturing
- Optical power measurement



Lightwaves2020's Inline Optical Power Monitor (IOPM) combines compact single-channel Miniature Tap Optical Power Monitor (MOPM) with state-of-the-art control electronics and firmware within a small-form factor package to offer real-time monitoring and remote measurement of optical power on light path, and provide collection of optical power variation information and trigger the alarm when the optical power level are less or larger than certain threshold. The real-time monitoring information can be accessed via RS232 interface or directly via analog voltage value. The monitor includes a digital LCD display.

Covering the operating wavelength range from 1525 to 1615nm, the IOPM offers excellent optical and electrical performance, including low dark current, low excess insertion loss, low wavelength and polarization dependence, wide dynamic optical power range and ultra flat power response over a wide wavelength range.

Lightwaves2020's IOPM simplifies the demanding applications in optical systems and networks. In addition to be used in telecommunication network monitoring, this intelligent Mini Inline Optical Power Monitor can be used in special networks, such as security, banking, transportation, and oil lines, etc.

Miniature Inline Optical Power Monitor with LCD Display

Specifications

Parameter	Unit	Min.	Typ.	Max.	Notes
Operating Wavelength Range	nm	1525	-	1615	
Tap Ratio	%	1	3	5	
Insertion Loss	dB			0.4	1% tap ratio
				0.5	3% tap ratio
				0.6	5% tap ratio
Polarization Dependent Loss	dB		0.05	0.1	
Wavelength Dependent Loss	dB		0.05	0.15	
Polarization Mode Dispersion	ps			0.1	
Return Loss	dB	45		-	
Optical Input Power Range	dBm	- 45		23	
Optical Power Accuracy	dB		+/- 0.1		*
Optical Responsivity Flatness	dB			± 0.3	with respect to band center
Optical Polarization Dependent Responsivity	dB			0.1	
Frequency Response Bandwidth	MHz			10	

*: The accuracy is defined at 1550nm with input power > -30dBm, and at 23°C.

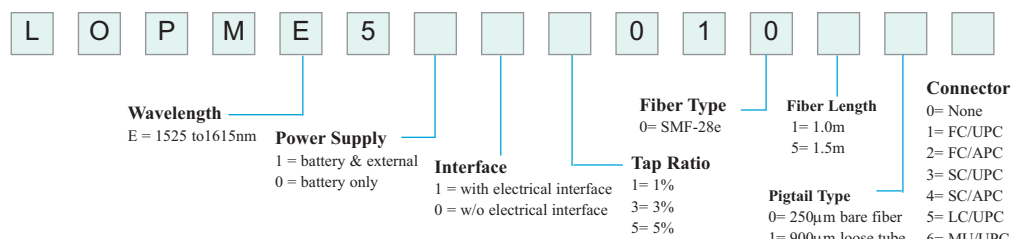
Physical & Environmental

Item	Unit	Range
Operating Temperature	°C	0 to 50
Storage Temperature	°C	-40 to 85
Relative Humidity (non-condensing)	%RH	10 to 90
Fiber Pigtail	-	SMF-28e, 250µm bare fiber or 900µm loose tube
Dimension (H x W x D)	mm	80 x 50 x 20
Power Supply	-	Battery / +5VDC external

Electrical Interface

1. Vcc (+5V)
2. TX
3. RX
4. Ground
5. Ground
6. Reset
7. Analog Ground
8. Analog Monitoring Output (0-2V)

Ordering Information



This product information is subject to change without notice.



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