Compact In-Line Optical Wavelength / Power Monitor (CIOM)



Features / Benefits

- Real time wavelength and power monitoring
- Precise wavelength measurement
- Wide dynamic range

Preliminary

- In-line and network ready
- Remote data storage/reporting
- 10/100 base Ethernet interface
- Compact and rugged design
- Integrated USB interface
- Optional GSM / GPRS wireless interface

Applications

- On-site services
- Network system installation
- Network segment monitoring*
- CATV
- FTTx
- Manufacturing
- Maintenance / Repairing



Lightwaves2020 Inc.'s Compact In-Line Optical Wavelength / Power Monitor (CIOM) is a physical layer in-line monitoring device which enables real time monitoring and tracking of the optical wavelength and power of an optical system and/or a network link. Based on our proprietary thin film technologies and vertical integration capabilities, the CIOM is designed to have unique remote functions as well. It can be used to monitor, report and manage the optical data and alarms through the 802.3 Ethernet LAN or GSM / GPRS wireless interface (optional).





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Optical

Parameters	Unit	Specification
Wavelength Range	nm	1260 to 1610
Wavelength Accuracy	nm	+/- 0.1**
Optical Power Range for Wavelength	dBm	-35 to +15
Power Range	dBm	-60 to +15
Optical Power Accuracy	dB	+/- 0.1**
Maximum Input Optical Power	dBm	20

**: The accuracy is in 1310nm and 1550nm, at 23°C.

Environmental & Physical

Item	Unit	Specification
Operating Temperature	°C	0 to 50
Storage Temperature	°C	-20 to 70
Relative Humidity (Non-Condensing)	%	10 to 90
Power Supply	VDC	5

* Example: Optical network line tracking and troubleshooting

Network engineer can connect the CIOM to a network line to keep track on the changes in optical wavelength and power. The CIOM can be configured to report alarms to a remote management station, through 802.3 Ethernet or GSM / GPRS wireless interface (optional), when a user-predefined alarm threshold is exceeded.



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