

SINGLE CHANNEL INTEGRATED WDM MONITORS

IWMS Series

Features

- ◆ Wide Operating Wavelength Range
- ◆ Low Insertion Loss and PDL
- ◆ Low Dark Current
- ◆ High Temperature Stability

Applications

- ◆ DWDM Channel Monitoring
- ◆ Optical Network Switch/Protection Monitoring
- ◆ Re-configurable Optical Add/drop Multiplexers
- ◆ Gain/Attenuation Monitoring in Amplifier Systems

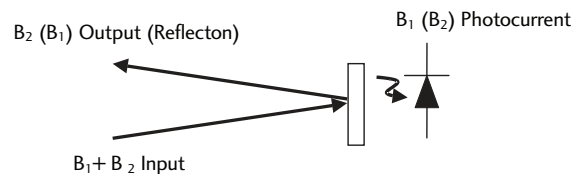
Single Channel Integrated WDM Monitors

Oplink's single channel Integrated WDM Monitor (IWMS) is a compact, WDM power monitoring device. It allows power monitoring at one or more wavelengths while transmitting all other wavelengths.

The IWMS integrates the functionality of a WDM filter and a photodiode while delivering low insertion loss and low dark current with high temperature stability over a wide wavelength range. It increases module design flexibility and efficiency by facilitating fiber management. It is compact and easy to mount on a PCB board for module and system use. Applications include DWDM channel power monitoring, optical network switching/protection monitoring, re-configurable optical add/drop multiplexers, and gain/attenuation monitoring in amplifier systems.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.

Functional Diagram

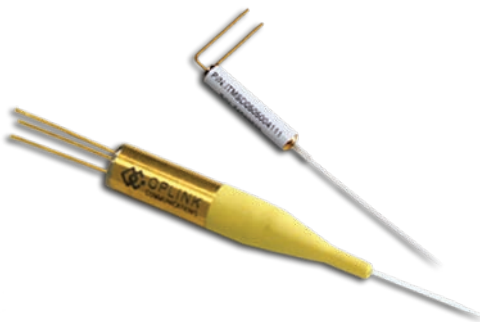


Performance Specifications

| Parameter | Min | Typical | Max | Units |
|--|---------------------|----------------------------|------|-------|
| B ₁ Wavelength Range | | 1260 ~ 1360 | | nm |
| B ₂ Wavelength Range | | 1525 ~ 1570 or 1570 ~ 1620 | | nm |
| Insertion Loss for Transmitted Signal ¹ | | | 0.6 | dB |
| Polarization Dependent Loss | | 0.03 | 0.05 | dB |
| B ₂ Output Isolation at B ₁ | 15 | | | dB |
| B ₁ Output Isolation at B ₂ | 35 | | | dB |
| Return Loss ¹ | 40 | | | dB |
| PD Responsivity | 0.7 | | | A/W |
| Input Optical Power | -20 | | 10 | dBm |
| Dark Current@ -5V bias, 70°C | PD Bandwidth = 0.5G | | 10 | nA |
| | PD Bandwidth = 1.0G | | 5 | nA |
| Capacitance@ -5V bias (1MHz) | PD Bandwidth = 0.5G | | 20 | pF |
| | PD Bandwidth = 1.0G | | 5 | pF |
| Operating Temperature | -5 | | 70 | °C |
| Storage temperature | -40 | | 85 | °C |
| Soldering Temperature (10s) | | | 260 | °C |
| Fiber Type | | SMF-28 | | |
| Package Dimension | Standard | ∅ 5.6 x 27.0 | | mm |
| | Miniature | ∅ 3.3 x L ² | | mm |

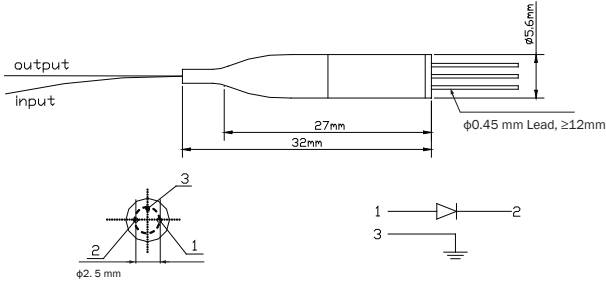
1. Excluding connectors

2. Bare fiber L=17mm; With 900 μm loose tube L =22 mm



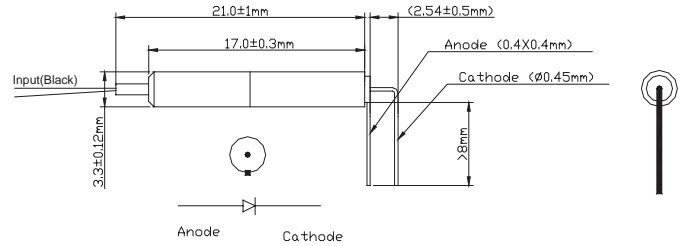
Mechanical Drawing / Package Dimensions (dimension in mm)

Standard Package (P1, Bare Fiber or Loose Tube)



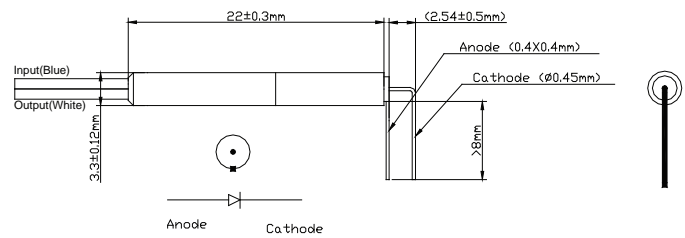
Standard Package Pin Assignment
 Pin 1: Anode
 Pin 2: Cathode
 Pin 3: Case Ground

Miniature Package (P4, Bare Fiber)



Note:
 Anode is connected to the metal housing.

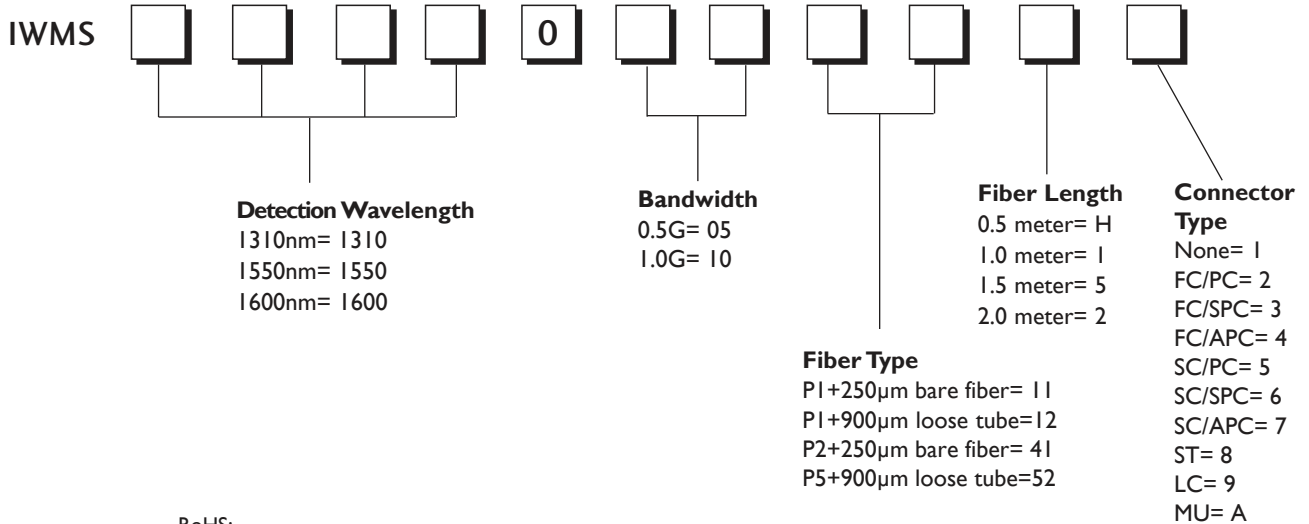
Miniature Package (P5, Loose Tube)



Note:
 Anode is connected to the metal housing.

Ordering Information

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.



RoHS:
 1) Add "G" to the end of the above PN for RoHS 6.