

SINGLE CHANNEL INTEGRATED WDM MONITORS

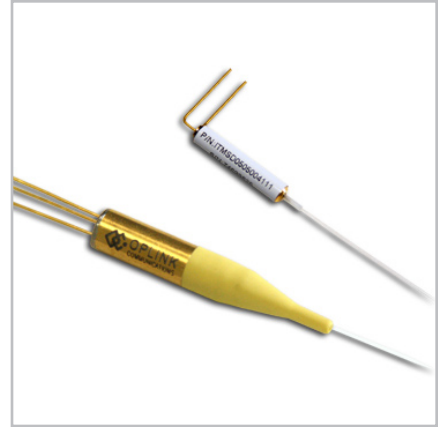
IWMS Series

Product Description

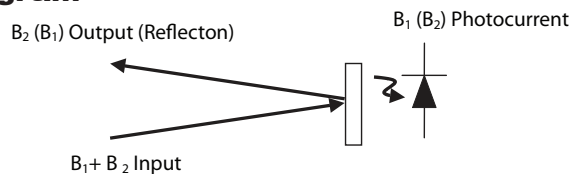
Oplink's single channel Integrated WDM Monitor (IWMS) is a compact, WDM power-monitoring device. It allows power monitoring at one or more wavelengths while transmitting all other wavelengths.

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 Specification

Parameters	Min	Typical	Max	Unit
B ₁ Wavelength Range	1260~1360			nm
B ₂ Wavelength Range	1525 ~ 1570 or 1570 ~1620			nm
Insertion Loss for Transmitted Signal	0.6			dB
Polarization Dependent Loss	0.03		0.05	dB
Reflection Isolation	15			dB
Detection Isolation	35			dB
Return Loss	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 Range	- 5 to +70			°C
Storage Temperature Range	- 40 to +85			°C
Soldering Temperature (10s)	260			°C
Fiber Type	Corning SMF-28			
Package Dimension	Standard	Ø 5.6 x 27.0		mm
	Miniature	Ø 3.3 x 17.0	bare fiber	
		Ø 3.3 x 22.0	loose tube	

Features

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

Applications

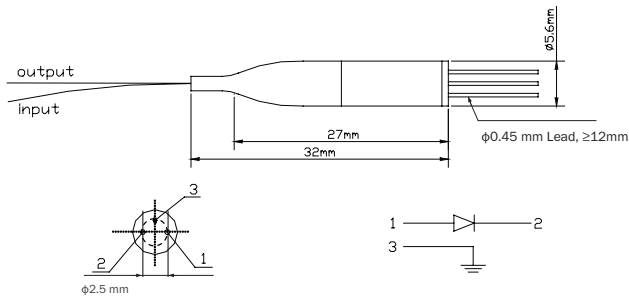
- ◆ DWDM Channel Monitoring
- ◆ Optical Network Switch/Protection Monitoring
- ◆ Re-configurable Optical Add/drop Multiplexers
- ◆ Gain/Attenuation Monitoring in Amplifier Systems

* All spec excluding connectors.

** The maximum IL is under all states of polarization and within the full operating temperature and wavelength ranges specified.

Mechanical Drawing / Package Dimensions (dimension in mm)

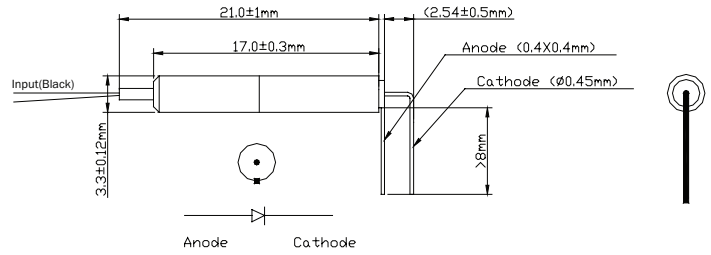
Standard Package (P1, Bare Fiber or Loose Tube)



Standard Package Pin Assignment

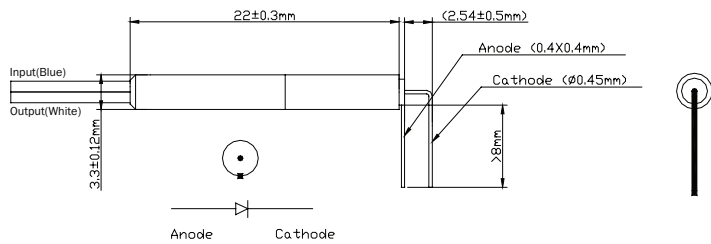
- Pin 1: Anode
- Pin 2: Cathode
- Pin 3: Case Ground

Miniature Package (P4, Bare Fiber)



Note:
Anode is connected to the metal housing.

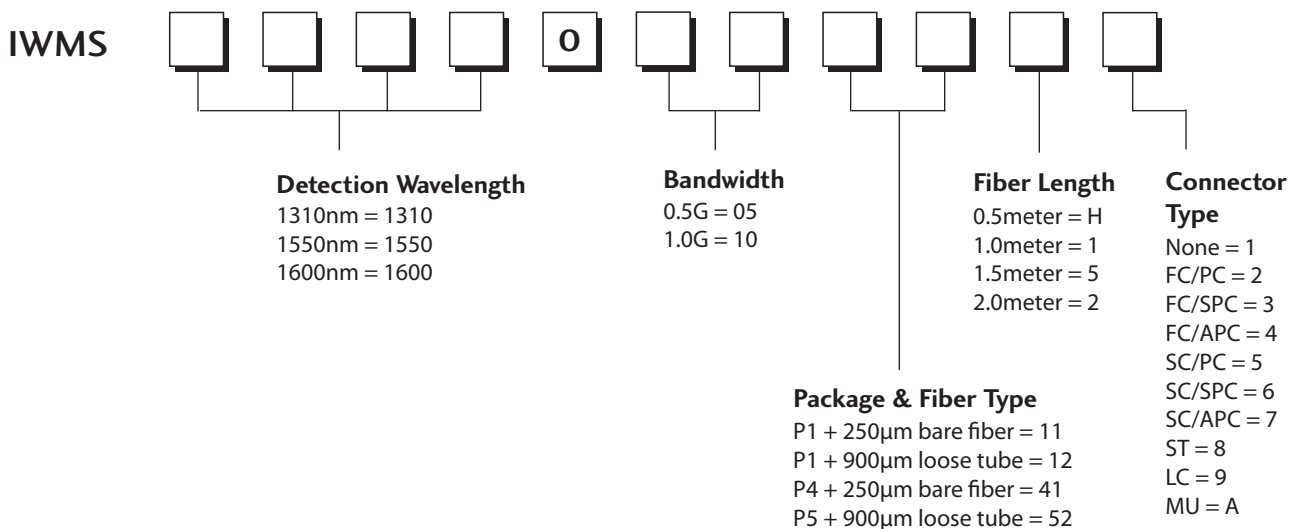
Miniature Package (P5, Loose Tube)



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 Requirement.