

# 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

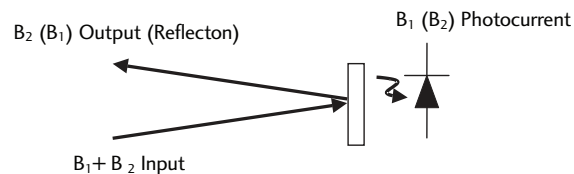
### Single Channel Integrated WDM Monitors

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

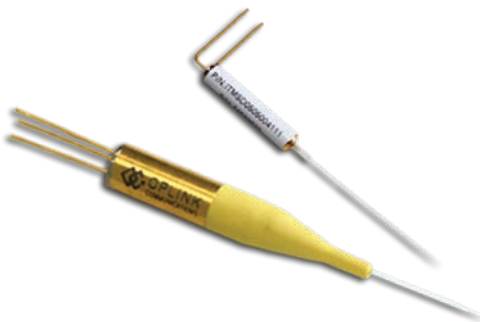


### Performance Specifications

Parameter	Min	Typical	Max	Units
B <sub>1</sub> Wavelength Range		1260 ~ 1360		nm
B <sub>2</sub> Wavelength Range		1525 ~ 1570 or 1570 ~ 1620		nm
Insertion Loss for Transmitted Signal <sup>1</sup>			0.6	dB
Polarization Dependent Loss		0.03	0.05	dB
B <sub>2</sub> Output Isolation at B <sub>1</sub>	15			dB
B <sub>1</sub> Output Isolation at B <sub>2</sub>	35			dB
Return Loss <sup>1</sup>	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 <sup>2</sup>	mm

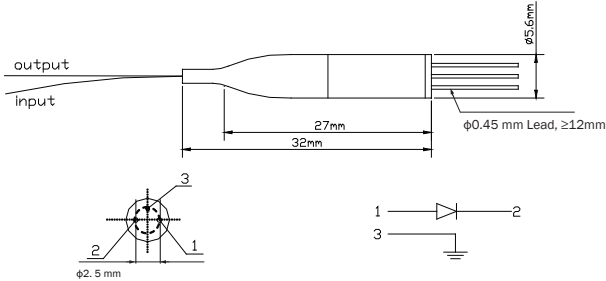
1. Excluding connectors

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



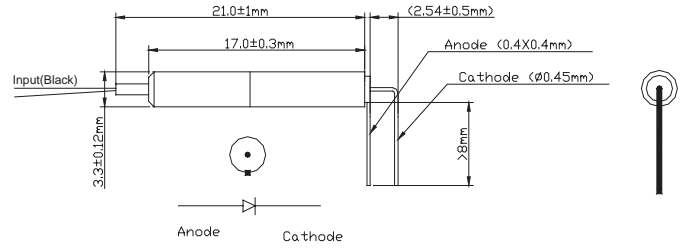
Mechanical Drawing / Package Dimensions (dimension in mm)

Standard Package (P1, Bare Fiber or Loose Tube)



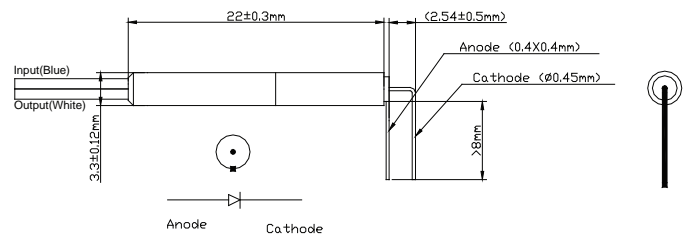
Standard Package Pin Assignment  
 Pin 1: Anode  
 Pin 2: Cathode  
 Pin 3: Case Ground

Miniature Package (P4, Bare Fiber)



Note:  
 Anode is connected to the metal housing.

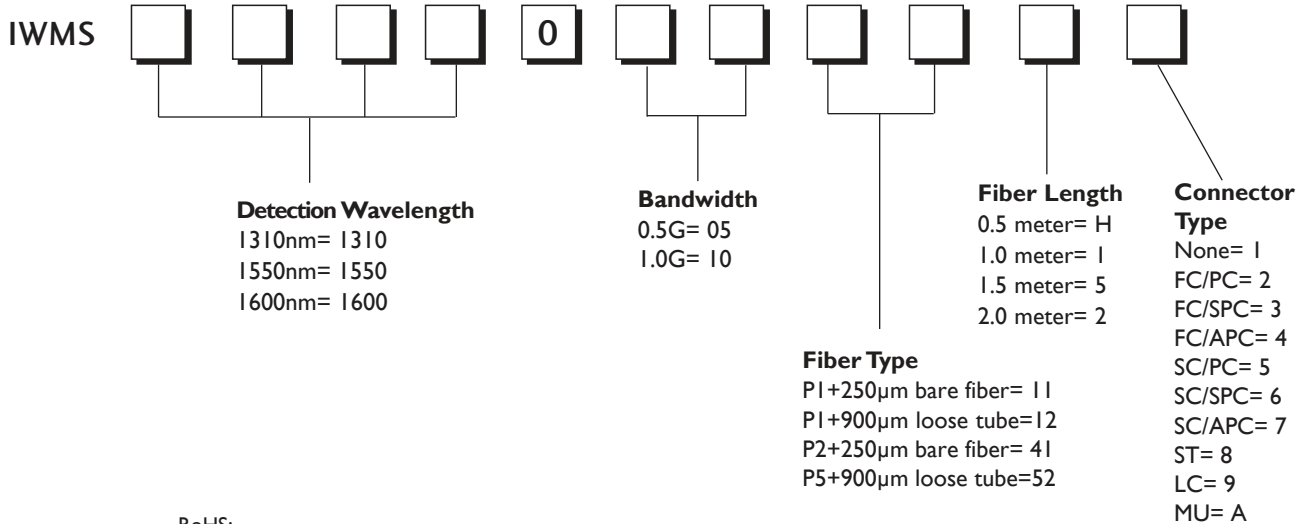
Miniature Package (P5, Loose Tube)



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.