

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

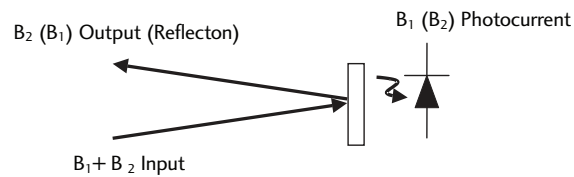
Single Channel Integrated WDM Monitors

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

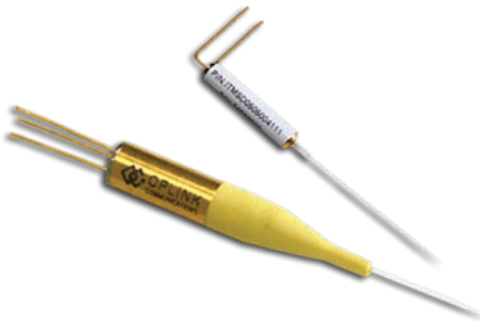


Performance Specifications

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	ø 5.6 x 27.0		mm
	Miniature	ø 3.3 x L ²		mm

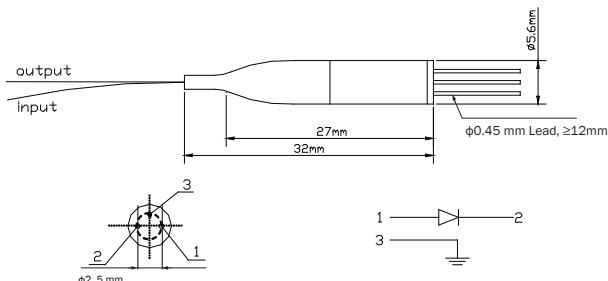
1. Excluding connectors

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



Mechanical Drawing / Package Dimensions (dimension in mm)

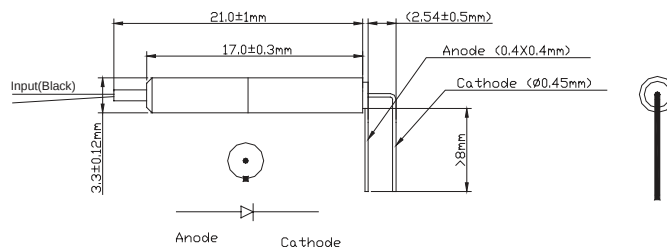
Standard Package (P1, Bare Fiber or Loose Tube)



Standard Package Pin Assignment

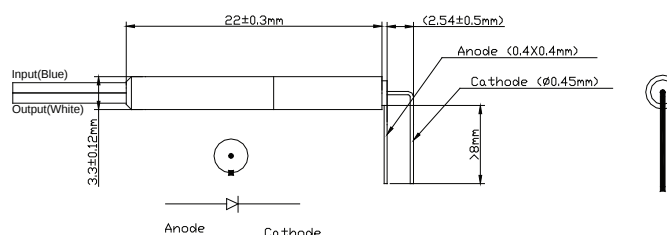
Pin 1: Anode
Pin 2: Cathode
Pin 3: Case Ground

Miniature Package (P4, Bare Fiber)



Note:
Anode is connected to the metal housing.

Miniature Package (P5, Loose Tube)

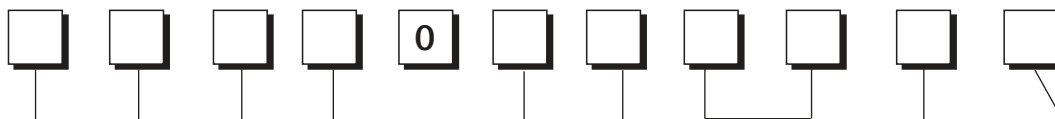


Note:
Anode is connected to the metal housing.

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.

IWMS



Detection Wavelength

1310nm= 1310
1550nm= 1550
1600nm= 1600

Bandwidth

0.5G= 05
1.0G= 10

Fiber Type

P1+250μm bare fiber= 11
P1+900μm loose tube=12
P2+250μm bare fiber= 41
P5+900μm loose tube=52

Fiber Length

0.5 meter= H
1.0 meter= 1
1.5 meter= 5
2.0 meter= 2

Connector Type

None= 1
FC/PC= 2
FC/SPC= 3
FC/APC= 4
SC/PC= 5
SC/SPC= 6
SC/APC= 7
ST= 8
LC= 9
MU= A

RoHS:

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