# 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

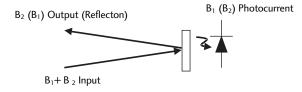
# **Single Channel Integrated WDM Monitors**

Oplink's single channel Integrated WDM Monitor (IWMS) is acompact, 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 WDMfilter and a photodiode while delivering low insertionloss and low dark current with high temperaturestability over a wide wavelength range. It increasesmodule design flexibility and efficiency byfacilitating fiber management. It is compact and easyto 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/dropmultiplexers, 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>I</sub> Wavelength Range		1260 ~ 1360		nm	
B <sub>2</sub> Wavelength Range		1525 ~ 1570 or 1570 ~ 1620		nm	
Insertion Loss for Transmitted Signal				0.6	dB
Polarization Dependent Loss			0.03	0.05	dB
B2 Output Isolation at B1		15			dB
B1 Output Isolation at B2		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 (IMHz)	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 × 27.0		mm
	Miniature		ø 3.3 x L <sup>2</sup>		mm



2. Bare fiber L=17mm; With 900  $\mu m$  loose tube L =22 mm



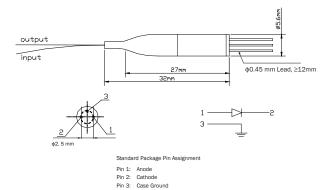




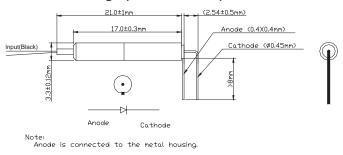
#### **IWMS SERIES**

### Mechanical Drawing / Package Dimensions (dimension in mm)

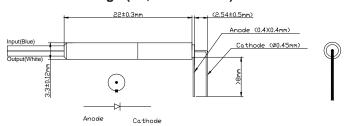
#### Standard Package (P1, Bare Fiber or Loose Tube)



#### Miniature Package (P4, Bare Fiber)



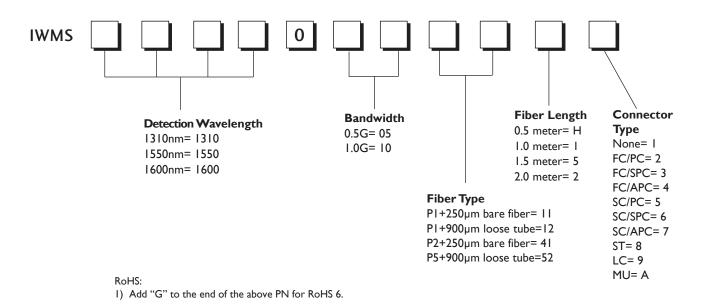
## Miniature Package (P5, Loose Tube)



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.



R3.20070830