Integrated WDM Monitor Array

IWMA Series

Product Description

Oplink's Integrated WDM Monitor Array (IWMA) is a compact, multi-channel WDM power-monitoring device. It allows power monitoring at one set of wavelengths while transmitting another set of wavelengths.

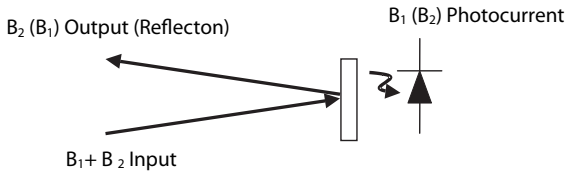
IWMA integrates the functionality of a WDM filter and a photodiode, delivering low insertion loss and low dark current with high temperature stability over a wide wavelength range. It increases module design flexibility and efficiency by significantly reducing the number of assembly components and facilitating fiber management.

Easily mounted on a PCB, Oplink's standard 12-pin package provides power monitoring for up to eight channels. 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
Number of Channels			4 or 8		
B_1 Wavelength Range	1310 band		1260 ~ 1360		nm
B_2 Wavelength Range	C-band		1525 ~ 1570		nm
	L-band		1570 ~ 1620		nm
Insertion Loss for Transmitted Signal [1], [2]				0.6	dB
Polarization Dependent Loss			0.03	0.05	dB
Reflection Isolation		15			dB
Detection Isolation		35			dB
Return Loss [2]		45			dB
PD Responsivity		0.6			A/W
Input Optical Power				10	dBm
Dark Current @ -5V bias, 70°C	PD Bandwidth = 0.5G			10	nA
	PD Bandwidth = 2.0G			5	nA
Operating Temperature Range			- 5 to +70		°C
Storage Temperature Range			- 40 to +85		°C
Fiber Type			SMF-28		

PRELIMINARY

Features

- Standard, 12-pin package easily mounted on a PCB
- 4 or 8 channel configurations
- Wide operating wavelength range
- Low insertion ooss
- Low polarization dependent loss
- Low dark current
- High temperature stability

Applications

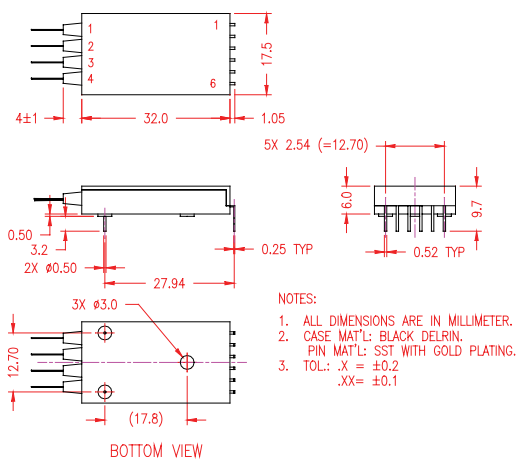
- DWDM channel monitoring
- Optical network switch/protection monitoring
- Re-configurable Optical Add/Drop Multiplexers
- Gain/attenuation monitoring in amplifier systems

Notes:
[1] Within operating wavelength range and temperature ranges specified, under all states of polarization.
[2] Exclude connectors.

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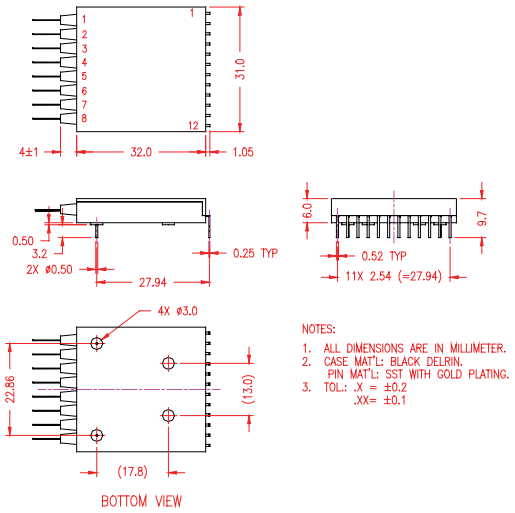
Mechanical Drawing / Package Dimensions (dimension in mm)

1) 4-ch IWMA



Electrical Pin Assignment		
Pin#:	Common Cathode Assignment	Common Anode Assignment
Pin1:	Common Cathode for Ch1 & 2	Common Anode for Ch1 & 2
Pin2:	Anode Ch1	Cathode Ch1
Pin3:	Anode Ch2	Cathode Ch2
Pin4:	Common Cathode for Ch3 & 4	Common Anode for Ch3 & 4
Pin5:	Anode Ch3	Cathode Ch3
Pin6:	Anode Ch4	Cathode Ch4

2) 8-ch IWMA



Electrical Pin Assignment		
Pin#:	Common Cathode Assignment	Common Anode Assignment
Pin1:	Common Cathode for Ch1 & 2	Common Anode for Ch1 & 2
Pin2:	Anode Ch1	Cathode Ch1
Pin3:	Anode Ch2	Cathode Ch2
Pin4:	Common Cathode for Ch3 & 4	Common Anode for Ch3 & 4
Pin5:	Anode Ch3	Cathode Ch3
Pin6:	Anode Ch4	Cathode Ch4
Pin7:	Anode Ch5	Cathode Ch5
Pin8:	Common Cathode for Ch5 & 6	Common Anode for Ch5 & 6
Pin9:	Anode Ch6	Cathode Ch6
Pin10:	Anode Ch7	Cathode Ch7
Pin11:	Common Cathode for Ch7 & 8	Common Anode for Ch7 & 8
Pin12:	Anode Ch8	Cathode Ch8

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.

IWMA □ □ □ □ □ □ □ □ □ □ □ □

No. of Channal
4 channels = 4
8 channels = 8

Detection Wavelength
1310 band = 1310
C-band = 1550
L-band = 1600

Type
Common anode = 0
Common cathode =1

Bandwidth
0.5G = 05
2.0G = 20

Fiber Type
SMF-28 250µm =1
SMF-28 w/ 900µm loose tube =2
SMF-28 ribbonized =3

Fiber Length
0.5meter= H
1.0meter= 1
1.5meter= 5
2.0meter= 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. IWMA is RoHS 5 compliant (RoHS permitted Lead in solder exemption is applied).
2. Add "G" to the end of the above PN for RoHS 6 Requirement.

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