Integrated WDM Monitor Arrays

IWMA Series

Features

- Standard, 12-pin Package Easily Mounted on a PCB
- 4 or 8 Channel Configurations
- 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

Integrated WDM Monitor Arrays

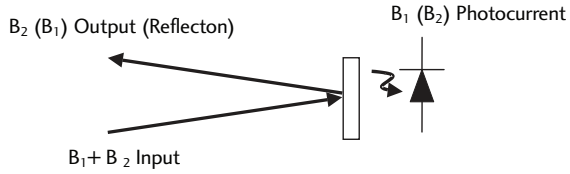
Oplink's Integrated WDM Monitor Array(IWMA) is a compact, multi-channel WDM power-monitoring device. It allows power monitoring at one set of wavelengths while transmitting another set of wavelengths.

IWMA integrates the functionality of a WDM filter and a photodiode and 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 Specifications

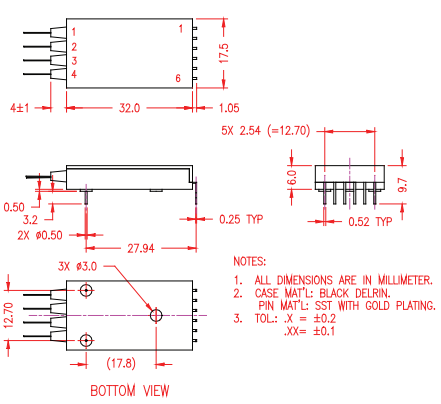
Parameter		Min	Typical	Max	Units
Number of Channels			4 or 8		
B1 Wavelength Range	1310 band		1260 ~ 1360		nm
B2 Wavelength Range	C-band		1525 ~ 1570		nm
	L-band		1570 ~ 1620		nm
Insertion Loss for Transmitted Signal [1, 2]				0.6	dB
Polarization Dependent Loss			0.03	0.05	dB
B2 Output Isolation at B1		15			dB
B1 Output Isolation at B2		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 =1.0G			5	nA
Operating Temperature		-5		70	°C
Storage Temperature		-40		85	°C
Fiber Type			Corning SMF-28		

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

OPLINK COMMUNICATIONS

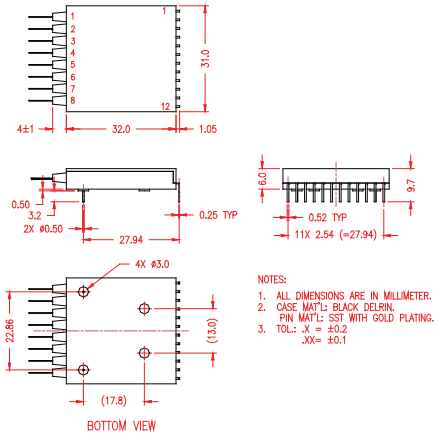
Mechanical Footprint Dimension (unit: mm)

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 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 Channel
4 Channels = 4
8 Channels = 8

Detection Wavelength
1310nm= 1310
1550nm= 1550
1600nm= 1600

Type
Common anode= 0
Common cathode= 1

PD Bandwidth
0.5G= 05
2.0G= 20

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

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. 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.

46335 Landing Parkway Fremont, CA 94538-6407 Tel: (510 933-7200 Fax: (510) 933-7300 Email: Sales@Oplink.com