

PASSIVE OPTICAL NETWORK MODULES

PONM Series

Features

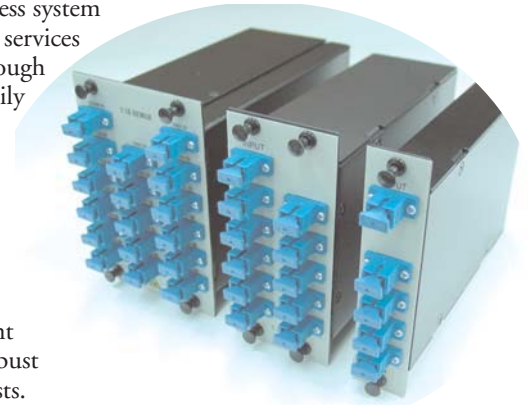
- ◆ Operating in standard 1310, 1550 nm window and CWDM channels
- ◆ Low excess loss and insertion loss
- ◆ Low polarization dependence and dispersion
- ◆ High optical power handling
- ◆ Bi-directional
- ◆ Operate in outside plant
- ◆ Priced for fiber to user applications

Applications

- ◆ Passive Optical Networks (PON)
- ◆ CATV networks
- ◆ FTTH (Fiber To The Home, Business, Curb)

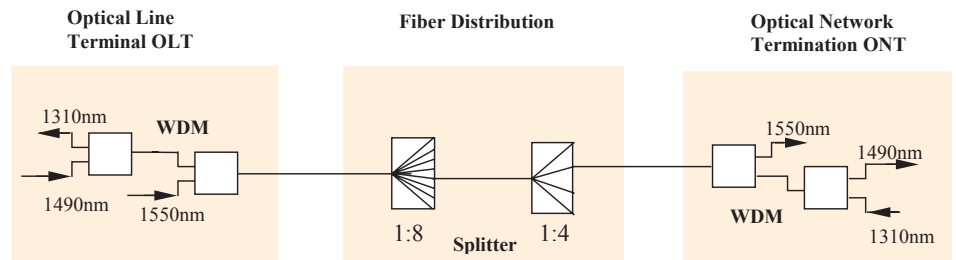
Passive Optical Network Modules

Fiber To The User (FTTU) Passive Optical Network (PON) technology provides cost-effective and virtually unlimited bandwidth access system that is capable to support video, voice and data services with up to 1Gb/s. Other enhanced services through Ethernet/IP, ATM and/or TDM can also be easily upgraded into the PON. Oplink PON Modules include various version of WDMs and Splitters based on multiple technology platforms (thin-film filter, fused splitter, and planar splitter) to provide superior performance with lowest level of insertion loss and the best channel-channel uniformity. High reliability to withstand severe outside plant environment conditions is achieved through robust package design and gone through systematic tests.



Oplink provides custom design for various PON Modules based on specific requirement on optical performance and packaging in LGX Box, Cassettes, Shelves, or Enclosures. Please contact Oplink Sales Representatives with your requirements.

Example Fiber to the User (FTTU) Architecture



Oplink Fiber Optic Product Lines

- ◆ Amplifier Components
- ◆ Amplifier Modules
- ◆ DWDMs
- ◆ Switching/Routing/Monitoring/Conditioning
- ◆ Transmission
- ◆ RGB Laser Modules



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Example Performance Specifications

PON Wavelength Division Multiplexer (WDM)

1. 1310/1550 nm WDM

Center Wavelength		1310 nm	1550 nm
Bandwidth		±15 nm	±10 nm
Insertion Loss ¹	Port 1	0.3	17
	Port 2	17	0.3
Polarization Dependent Loss		0.15 dB	

2. 1310/1490/1550 nm WDM

Center Wavelength		1310 nm	1490 nm	1550 nm
Bandwidth		±15 nm	±10 nm	±10 nm
Insertion Loss ¹	Port 1	1.0	15	10
	Port 2	15	1.0	10
	Port 3	20	20	1.0
Polarization Dependent Loss		0.15 dB		

Common specifications

Return Loss	50 dB		
Operating temperature	-40 to 85 °C (Designed for Outside Plant)		
Storage temperature	-50 to 85 °C		

PON 1xN Splitter 1310/1550±20nm or 1xN Splitter 1310/1490/1550 nm

Parameter	Specifications							Unit
	1x3	1x4	1x5	1x6	1x8	1x16	1x32	
Type								
Maximum Insertion Loss (IL) ¹	6.1	7.2	8.5	9.6	11.0	14.0	17.5	dB
Polarization Dependent Loss (PDL)	0.16	0.3	0.32	0.34	0.35	0.4	0.42	dB
Return Loss (RL)	50							dB
Operating temperature	-40 to 85							°C
Storage temperature	-50 to 85							°C

Notes

1. Values are referenced without connector loss

