

Passive Optical Networks

xWDM/xPON WDM1r series multiplexers



INTRODUCTION:

xWDM/xPON multiplexers can be applied in expanding an existing PON network to new services or protocols. xWDM/xPON solutions family consists of devices compliant with the ITU-T G.984.5 recommendation as well as dedicated solutions adapted to the Customer's needs. High quality components ensure very high operation stability of xWDM/xPON multiplexers in the whole spectral range and perfect thermal stability. xWDM/xPON multiplexers are available both in a version without connectors (intended for splicing) and with any connector type.

APPLICATIONS:

WDM systems
FTTH access networks
Cable networks and HFC
Other optical telecommunication networks

FEATURES AND ADVANTAGES:

High thermal stability of parameters
Low insertion and polarization losses
High interchannel isolation
Available with any type of fiber optic connectors
Available non-standard solutions with specialized functionalities

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TECHNICAL SPECIFICATIONS:

Insertion loss and isolation:

Multiplexer ¹	Protocol/service	Spectral range	Max. insertion loss ²	Isolation
WDM1r.1	GPON	1290-1330 nm 1480-1500 nm	0.7 dB	≥ 25 dB
	NGA	1260-1280 nm 1524-1625 nm	0.7 dB	≥ 16 dB
WDM1r.3	GPON	1290-1330 nm 1480-1500 nm	0.7 dB	≥ 25 dB
	NGA	1260-1280 nm 1524-1625 nm	1.0 dB	≥ 16 dB
	OTDR	1625-1650 nm	1.0 dB	≥ 25 dB
WDM1r.4	GPON	1290-1330 nm 1480-1500 nm	0.7 dB	≥ 25 dB
	NGA	1260-1280 nm 1575-1580 nm	1.7 dB	≥ 25 dB
	VIDEO	1550-1560 nm	2.2 dB	≥ 16 dB
	OTDR	1625-1650 nm	2.1 dB	≥ 25 dB

¹Nomenclature according to ITU-T G.984.5 recommendation

²Additional insertion losses in the case of multiplexers with connectors: +0.4 dB

Other parameters:

Parameter	Unit	Value
PDL	dB	≤0.1
Directivity	dB	≥55
RL	dB	≥50
Max. input power	dBm	23
Temp. operating range	°C	-10/+70
Temp. storage range	°C	-40/+85
Fiber type	-	G.652.D

ORDERING INFORMATION:

Series	Quality	Fiber type	Optical functionality	Monitoring port	Multiplexer type	Cable type	Pigtail length	Housing	Connector in	Connectors out
XW	G0	1 - G.652D	SMU - Standard Mux	0 - no port	WDM1r.1	20 - 2.0 mm cable	LL - length in dm	1-SST 44x28x7 mm	ST	ST
		2 - G.657A1	CMU - Compact Mux	1 - monitor 1% standard uni-di	WDM1r.3	25 - 250 μm fiber	12 - 1.2 m	2-ABS 100x80x10 mm	SC	SC
		3 - G.657A2		2 - monitor 1% standard bi-di	WDM1r.4	90 - 900 μm tube		3-ABS 120x80x18 mm	SCA	SCA
		4 - G.655		3 - monitor 5% standard uni-di				4-ABS 140x115x15 mm	FC	FC
				4 - monitor 5% standard bi-di					FCA	FCA
				5 - monitor 5% flat uni-di					LC	LC
				6 - monitor 5% flat bi-di					LCA	LCA
									E20	E20
									E2A	E2A

Example reference: XW-G0-3-SMU-0-WDM1r.1-20-10-2-SCA-SCA – WDM1r.1 SMU multiplexer, PREMIUM quality, without power monitoring port, G.657.A2 fiber, 1 m pigtail length, 2.0 mm tube, ABS housing of dimensions 100x80x10 mm, SCA connectors.

Important notice

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