

Type:	xWDM multiplexer family	27.06.2024
		REV: 1.2
		MP
Reference:	PZXW-, see system ref.	

## 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

## Passive Optical Networks

### TECHNICAL SPECIFICATIONS:

Insertion loss and isolation:

Multiplexer <sup>1</sup>	Protocol/service	Spectral range	Max. insertion loss <sup>2</sup>	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 1524-1580 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

<sup>1</sup>Nomenclature according to ITU-T G.984.5 recommendation

<sup>2</sup>Additional 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	Series	Fiber type	Monitoring port	Multiplexer type	Number of multiplexers	Housing type	Connector in	Connectors out
PZXW	G0	1 - G.652D	0 – no port	WDM1r.1	01-1	1 - 19", 1U	ST	ST
			2 - monitor 1% standard uni-di	WDM1r.3	02-2	2 - 19", 2U	SC	SC
		3 - G657A2	2 - monitor 1% standard bi-di	WDM1r.4		3 - LGX1	SCA	SCA
			4 - G655	3 - monitor 5% standard uni-di		4 - LGX2	FC	FC
			4 - monitor 5% standard bi-di		5 - LGX3	FCA	FCA	
			5 - monitor 5% flat uni-di			LC	LC	
			6 - monitor 5% flat bi-di			LCA	LCA	
						E20	E20	
				E2A	E2A			

Example reference: PZXW-G0-1-0-WDM1r.4-01-1-SCA-SCA – One WDM1r.4 multiplexer in PZXW patch panel of height 1U, PREMIUM quality, G.652.D fiber, without power monitoring channel, SCA connectors

**Important notice**

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