

Passive Optical Networks

xWDM/xPON CEMx 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 ¹	Protocol/service	Spectral range	Max. insertion loss ²	Isolation
CEMx.1	GPON	1290-1330 nm 1480-1500 nm	0.7 dB	≥ 25 dB
	XG-PON1	1260-1280 nm 1575-1580 nm	1.2 dB	≥ 25 dB
	TWDM-PON	1524-1544 nm 1596-1603 nm	1.4 dB	≥ 25 dB
	PtP WDM PON	1606-1625 nm	1.5 dB	≥ 16 dB
CEMx.3	GPON	1290-1330 nm 1480-1500 nm	0.7 dB	≥ 25 dB
	VIDEO	1550-1560 nm	1.8 dB	≥ 25 dB
	TWDM-PON	1524-1544 nm 1596-1603 nm	1.6 dB	≥ 25 dB
	PtP WDM PON	1606-1625 nm	1.6 dB	≥ 16 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	500
Temp. operating range	°C	0/+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	CEMx.1	01-1	1 - 19", 1U	ST	ST
		2 - G657A1	1 - monitor 1% standard uni-di	CEMx.3	02-2	2 - 19", 2U	SC	SC
		3 - G657A2	2 - monitor 1% standard bi-di			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-CEMx.1-01-1-SCA-SCA – One CEMx.1 multiplexer in PZXW patch panel of height 1U, PREMIUM quality, G.652.D fiber, without power monitoring channel, SCA connectors

Important notice

Buyer and/or user of this product has to make sure before using this product that it is suitable for the intended use. All questions of liability relating to this product are subject – in accordance with the prevailing – to the Terms of Sales of the selling Fibrain subsidiary.