

Type:	xWDM multiplexers family	27.06.2024
		REV: 1.2
		MP
Reference:	XW-, see system ref.	

## 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 <sup>1</sup>	Protocol/service	Spectral range	Max. insertion loss <sup>2</sup>	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

<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	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	CEMx.1	20 - 2.0 mm cable	LL - length in dm	1 - SST 44x28x7 mm	ST	ST
		3 - G657A2		2 - monitor 1% standard bi-di		90 - 900 μm tube		3 - ABS 120x80x18 mm	SCA	SCA
				4 - monitor 5% standard bi-di					FCA	FCA
				6 - monitor 5% flat bi-di					LCA	LCA
							E2A	E2A		

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