

# Coexistence Element (CEx)

## Existing and Next Generation PON

G-PON | XGS-PON | NG-PON2 | RF | Point to Point | OTDR monitoring

### Description

The Coexistence Element (CEx) is a single WDM device to combine current G-PON FTTH services with emerging XGS-PON and Next Generation NG-PON2 technologies. Additional provisioning wavelengths with the Coexistence Element include RF, Point to Point (PtP), and OTDR monitoring.

Montclair Fiber Optics offers a flexible platform of Coexistence Element products to fit a specific PON deployment that is most cost-effective to your needs – Depending on your requirements each CEx can be fully complemented with all PON services or with only the services requested.

Premium optical components and high-quality connectivity ensure superior performance, the lowest loss, and robust network reliability.

CE's are available in LGX<sup>®</sup> module, ruggedized cassette, rack-mount, and customized housings.

### Features

- )] Very low insertion loss & PDL
- )] High isolation
- )] Excellent environmental & mechanical stability
- )] Premium grade components & connectivity
- )] G.984.5 compliant
- )] RoHS compliant

Also available in LC High-Density (2x CEx) and SC (1x CEx) LGX<sup>®</sup> Modules:



2x CEx LC High-Density LGX<sup>®</sup> Module

1x CEx SC LGX<sup>®</sup> Module



CEx LC LGX<sup>®</sup> Module (pictured)

Common 1260-1675
GPON 1290-1330 / 1480-1500
NG-PON2 (TWDM) 1532-1540 / 1595-1603
Point to Point (PtP) 1610-1625
XGS-PON 1260-1280 / 1575-1580
RF 1550-1560

CEx wavelength port designation

Note:  
Available with OTDR Monitor port 1625 - 1675

CEx LC LGX Module

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### Optical specifications

Parameter	Port designation	Value
Passband Channel Wavelength (nm)  * Please Note: OTDR Monitor option is available; 1% Monitor port adds approx. 0.75 dB to the IL for each port	GPON	1290 - 1330   1480 - 1500
	NG-PON2 (TWDM)	1532 - 1540   1595 - 1603
	XGS-PON	1260 - 1280   1575 - 1580
	RF	1550 - 1560
	PtP	1610 - 1625
	* [OTDR Monitor]	[1625 - 1675]
Insertion Loss (dB   max.)	GPON	1.0
	NG-PON2 (TWDM)	1.0
	XGS-PON	1.0
	RF	1.2
	PtP	1.6
Isolation (dB   min.)	GPON	45
	NG-PON2 (TWDM)	30
	XGS-PON	30
	RF	12
	PtP	30
Return loss (dB   min.) - includes connectors		50
Insertion loss temperature sensitivity (dB/°C   min.)		0.005
Directivity (dB   min.)		50
Polarization dependent loss (dB   max.)		0.30
Polarization mode dispersion (ps   max.)		0.20
Passband Ripple (dB   max.)		0.30
Maximum optical power (mW   max.)		300
Operating temperature (°C)		-5 to +75
Storage temperature (°C)		-40 to +85
Conformance (where applicable)		G.984.5

### Housing dimensions

LGX® single slot wide module (mm)	129 x 125 x 28
Connector/Adapter type for GPON, NG-PON2, XGS-PON, PtP, OTDR ports	LC/UPC
Connector/Adapter type for RF and Common ports	LC/APC

Premium-Grade connectors and adapters

### Ordering information

**Part number:** MFT-M/NGP2-CE-ALC/LCU Add (M) to end of P/N for Monitor port

**Description:** Coexistence Element CEx LC LGX Module

Available in all the following adapters (connectors): LC/APC, LC/UPC, SC/APC, SC/UPC

Note: Other housing options available in ruggedized cassette, rack-mount, and custom