

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[®] 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 (1x CEx) and SC (1x CEx) LGX[®] Modules:



1x CEx LC LGX[®] Module

1x CEx SC LGX[®] Module



2x CEx LC High-Density LGX Module (pictured)
(note: 2 CEx's in a single LGX Module with LC adapters)

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

2x CEx wavelength port designation

Note:
Available with OTDR Monitor port 1625 - 1675

2x CEx LC High-Density 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(2) Add (M) to end of P/N for Monitor port

Description: 2x Coexistence Element CEx LC High-Density 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

2x CEx LC High-Density LGX Module