# CoEx
# Coexistence Element



A WDM module or coexistence element is designed to enable the implementation of gigabit passive optical network (GPON) evolutions to XGS-PON and NG-PON2.

Engineered for scenarios where services are already guaranteed using GPON but the deployment of different FTTH access technologies is desired, including Optical Time Domain Reflectometer (OTDR) signal too.

In other words, CoEx elements enable the convergence of multiple services over a common access network, allowing flexibility while saving on costs.

It's a plug and play solution for quick and easy handling and identification.

## Features and Benefits

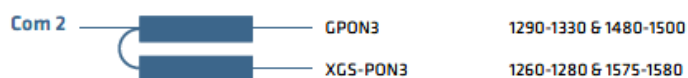Device can include one or more WDM elements, depending on type
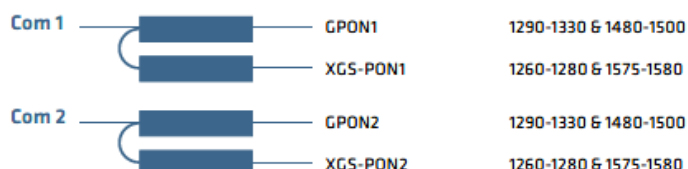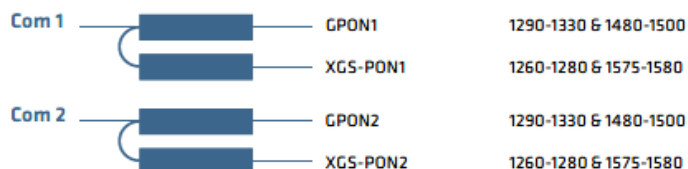
- Allows coexistence between XPON technologies and GPON, XGS-PON and NG-PON2
- OTDR signal also available
- Modules equipped with anti-dust shuttered adaptors and secure laser warning label
- Modules can be supplied in standard LGX box footprint or different and customised form factor

### Applications

- FTTx
- Telecommunications
- XPON,GPON,XGS-PON,NG-PON2,OTDR

# CoEx Type 1

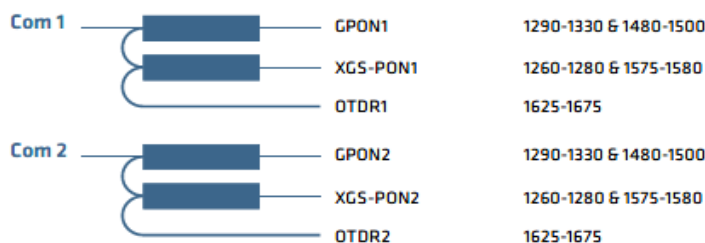## Allows coexistence of GPON and XGS-PON technologies

| Com 1 | | GPON1 | 1290-1330 & 1480-1500 |
| | | XGS-PON1 | 1260-1280 & 1575-1580 |
| Com 2 | | GPON2 | 1290-1330 & 1480-1500 |
| | | XGS-PON2 | 1260-1280 & 1575-1580 |

| Com 1 | | GPON1 | 1290-1330 & 1480-1500 |
| | | XGS-PON1 | 1260-1280 & 1575-1580 |
| Com 2 | | GPON2 | 1290-1330 & 1480-1500 |
| | | XGS-PON2 | 1260-1280 & 1575-1580 |
| Com 2 | | GPON3 | 1290-1330 & 1480-1500 |
| | | XGS-PON3 | 1260-1280 & 1575-1580 |

| Parameters | | |
|---|---|---|
| GPON wavelength (nm) | | 1290-1330 & 1480-1500 |
| XGS-PON wavelength (nm) | | 1260-1280 & 1575-1580 |
| Fiber type | | G652D |
| IL (dB) | COM-> GPON | ≤0.8 |
| | COM-> XGS-PON | ≤1.2 |
| Isolation (dB) | COM-> GPON@ XGS-PON | ≥30 |
| | COM-> XGS-PON @ GPON | ≥30 |
| PDL (dB) | | ≤0.15 |
| RL (dB) | | ≥50 |
| Directivity (dB) | | ≥50 |
| Max optical power (mw) | | 500 |
| Operating temperature (°C) | | -5~75 |
| Storage temperature (°C) | | -40~90 |
| Connector type | | SC/APC |
| LGX BOX | | 180*130*28 |

| Product name | Product description | Part no. |
|---|---|---|
| CoEx Type 1 | CoExistence of GPON and XGS-PON technologies | XCPSC03185 |

# CoEx  Type 2

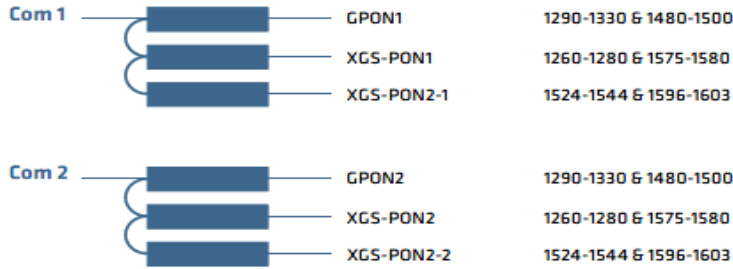## Allows coexistence of GPON and XGS-PON technologies and OTDR

| | | |
|---|---|---|
| Com 1 | GPON1 | 1290-1330 & 1480-1500 |
| | XGS-PON1 | 1260-1280 & 1575-1580 |
| | OTDR1 | 1625-1675 |
| Com 2 | GPON2 | 1290-1330 & 1480-1500 |
| | XGS-PON2 | 1260-1280 & 1575-1580 |
| | OTDR2 | 1625-1675 |

| Parameters | | |
|---|---|---|
| GPON wavelength (nm) | | 1290-1330 & 1480-1500 |
| XGS-PON wavelength (nm) | | 1260-1280 & 1575-1580 |
| OTDR (nm) | | 1625-1675 |
| Fiber type | | G652D |
| IL (dB) | COM-> GPON | ≤0.8 |
| | COM-> XGS-PON | ≤1.2 |
| | COM-> OTDR | ≤1.2 |
| Isolation (dB) | COM-> GPON@ XGS-PON & OTDR | ≥30 |
| | COM-> XGS-PON @ GPON & OTDR | ≥30 |
| | COM->OTDR @ GPON&XGS-PON | ≥15 |
| PDL (dB) | | ≤0.15 |
| RL (dB) | | ≥50 |
| Directivity (dB) | | ≥50 |
| Max optical power (mw) | | 500 |
| Operating temperature (°C) | | -5~75 |
| Storage temperature (°C) | | -40~90 |
| Connector type | | Com: LC/APC; Others: SC/APC |
| LGX BOX | | 180*130*28 |

| Product name | Product description | Part no. |
|---|---|---|
| CoEx  Type 2 | CoExistence of GPON and XGS-PON and OTDR | XCPSC03186 |

# CoEx Type 3

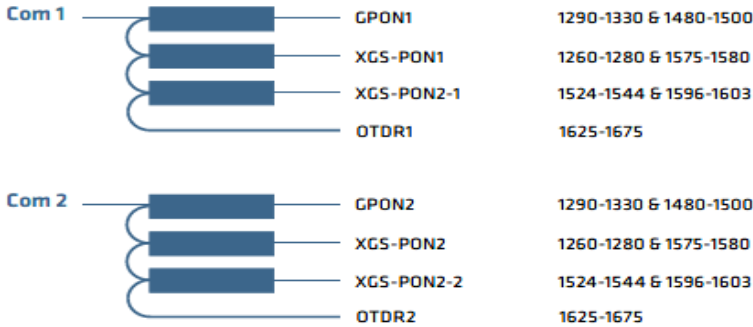## Allows coexistence of GPON -XGS-PON and NG-PON2 technologies

| Com 1 | | | |
|---|---|---|---|
| | GPON1 | 1290-1330 & 1480-1500 | |
| | XGS-PON1 | 1260-1280 & 1575-1580 | |
| | XGS-PON2-1 | 1524-1544 & 1596-1603 | |

| Com 2 | | | |
|---|---|---|---|
| | GPON2 | 1290-1330 & 1480-1500 | |
| | XGS-PON2 | 1260-1280 & 1575-1580 | |
| | XGS-PON2-2 | 1524-1544 & 1596-1603 | |

| Parameters | | |
|---|---|---|
| GPON wavelength (nm) | | 1290-1330 & 1480-1500 |
| XGS-PON wavelength (nm) | | 1260-1280 & 1575-1580 |
| NG-PON2 (nm) | | 1524-1544 & 1596-1603 |
| Fiber type | | G652D |
| IL (dB) | COM-> GPON | ≤0.8 |
| | COM-> XGS-PON | ≤1.2 |
| | COM-> NG-PON2 | ≤1.4 |
| Isolation (dB) | COM-> GPON @ XGS-PON & NG-PON2 | ≥30 |
| | COM-> XGS-PON @ GPON & NG-PON2 | ≥30 |
| | COM-> NG-PON2 @ GPON & XGS-PON | ≥30 |
| PDL (dB) | | ≤0.15 |
| RL (dB) | | ≥50 |
| Directivity (dB) | | ≥50 |
| Max optical power (mw) | | 500 |
| Operating temperature (°C) | | -5~75 |
| Storage temperature (°C) | | -40~90 |
| Connector type | | SC/APC |
| LGX BOX | | 180*130*28 |

| Product name | Product description | Part no. |
|---|---|---|
| CoEx Type 3 | CoExistence of GPON –XGS-PON and NG-PON2 | XCPSC02954 |

# CoEx  Type 4

## Allows coexistence of GPON –XGS-PON and NG-PON2 and OTDR

| Com 1 | | |
|---|---|---|
| | GPON1 | 1290-1330 & 1480-1500 |
| | XGS-PON1 | 1260-1280 & 1575-1580 |
| | XGS-PON2-1 | 1524-1544 & 1596-1603 |
| | OTDR1 | 1625-1675 |

| Com 2 | | |
|---|---|---|
| | GPON2 | 1290-1330 & 1480-1500 |
| | XGS-PON2 | 1260-1280 & 1575-1580 |
| | XGS-PON2-2 | 1524-1544 & 1596-1603 |
| | OTDR2 | 1625-1675 |

| Parameters | | |
|---|---|---|
| GPON wavelength (nm) | | 1290-1330 & 1480-1500 |
| XGS-PON wavelength (nm) | | 1260-1280 & 1575-1580 |
| NG-PON2 (nm) | | 1524-1544 & 1596-1603 |
| OTDR (nm) | | 1625-1675 |
| Fiber type | | G652D |
| IL (dB) | COM-> GPON | ≤0.8 |
| | COM-> XGS-PON | ≤1.2 |
| | COM-> NG-PON2 | ≤1.4 |
| | COM-> OTDR | ≤1.6 |
| Isolation (dB) | COM-> GPON@ XGS-PON & NG-PON2&OTDR | ≥30 |
| | COM-> XGS-PON @ GPON& NG-PON2&OTDR | ≥30 |
| | COM-> NG-PON2 @ GPON&XGS-PON&OTDR | ≥30 |
| | COM-> OTDR @ GPON & XGS-PON& NG-PON2 | ≥15 |
| PDL (dB) | | ≤0.15 |
| RL (dB) | | ≥50 |
| Directivity (dB) | | ≥50 |
| Max optical power (mw) | | 500 |
| Operating temperature (°C) | | -5~75 |
| Storage temperature (°C) | | -40~90 |
| Connector type | | Com: LC/APC: Others: SC/APC |
| LGX BOX | | 180*130*28 |

| Product name | Product description | Part no. |
|---|---|---|
| CoEx  Type 4 | CoExistence of GPON –XGS-PON and NG-PON2 and OTDR | XCPSC02955 |

**PRYSMIAN**
**Draka**

Prysmian Group

# CoEx Type 5

## Allows coexistence of GPON and NG-PON2
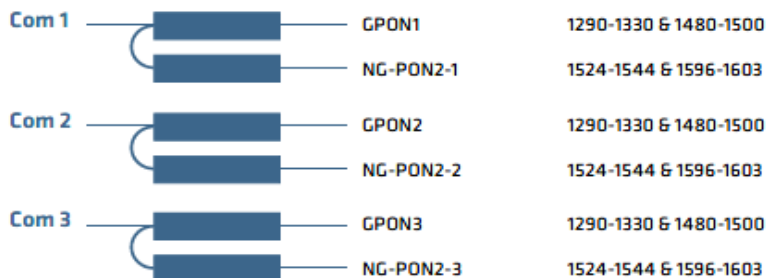
| | | |
|---|---|---|
| Com 1 | GPON1 | 1290-1330 & 1480-1500 |
| | NG-PON2-1 | 1524-1544 & 1596-1603 |
| Com 2 | GPON2 | 1290-1330 & 1480-1500 |
| | NG-PON2-2 | 1524-1544 & 1596-1603 |
| Com 3 | GPON3 | 1290-1330 & 1480-1500 |
| | NG-PON2-3 | 1524-1544 & 1596-1603 |

| Parameters | | |
|---|---|---|
| GPON wavelength (nm) | | 1290-1330 & 1480-1500 |
| NG-PON2 (nm) | | 1524-1544 & 1596-1603 |
| Fiber type | | G652D |
| IL (dB) | COM-> GPON | ≤0.8 |
| | COM-> NG-PON2 | ≤1.2 |
| Isolation (dB) | COM-> GPON@ NG-PON2 | ≥30 |
| | COM-> NG-PON2 @ GPON | ≥30 |
| PDL (dB) | | ≤0.15 |
| RL (dB) | | ≥50 |
| Directivity (dB) | | ≥50 |
| Max optical power (mw) | | 500 |
| Operating temperature (°C) | | -5~75 |
| Storage temperature (°C) | | -40~90 |
| Connector type | | SC/APC |
| LGX BOX | | 180*130*28 |

| Product name | Product description | Part no. |
|---|---|---|
| CoEx Type 5 | CoExistence of GPON and NG-PON2 | XCPSC03187 |

# CoEx Type 6

## Allows coexistence of GPON - NG-PON2 and OTDR

| Com 1 | GPON1 | 1290-1330 & 1480-1500 |
| | NG-PON2-1 | 1524-1544 & 1596-1603 |
| | OTDR1 | 1625-1675 |
| Com 2 | GPON2 | 1290-1330 & 1480-1500 |
| | NG-PON2-3 | 1524-1544 & 1596-1603 |
| | OTDR2 | 1625-1675 |

| Parameters | | Value |
|---|---|---|
| GPON wavelength (nm) | | 1290-1330 & 1480-1500 |
| NG-PON2 (nm) | | 1524-1544 & 1596-1603 |
| OTDR (nm) | | 1625-1675 |
| Fiber type | | G652D |
| IL (dB) | COM-> GPON | ≤0.8 |
| | COM-> NG-PON2 | ≤1.2 |
| | COM-> OTDR | ≤1.2 |
| Isolation (dB) | COM-> GPON@ NG-PON2 & OTDR | ≥30 |
| | COM-> NG-PON2 @ GPON & OTDR | ≥30 |
| | COM-> OTDR @ GPON & NG-PON2 | ≥15 |
| PDL (dB) | | ≤0.15 |
| RL (dB) | | ≥50 |
| Directivity (dB) | | ≥50 |
| Max optical power (mw) | | 500 |
| Operating temperature (°C) | | -5~75 |
| Storage temperature (°C) | | -40~90 |
| Connector type | | Com: LC/APC; Others: SC/APC |
| LGX BOX | | 180*130*28 |

| Product name | Product description | Part no. |
|---|---|---|
| CoEx Type 6 | CoExistence of GPON -NG-PON2 and OTDR | XCPSC03188 |

**PART NUMBERS**

| Product Name | Product Description | Part Number |
|---|---|---|
| CoEx Type 1 | CoExistence of GPON and XGS-PON technologies | XCPSC03185 |
| CoEx Type 2 | CoExistence of GPON and XGS-PON and OTDR | XCPSC03186 |
| CoEx Type 3 | CoExistence of GPON –XGS-PON and NG-PON2 | XCPSC02954 |
| CoEx Type 4 | CoExistence of GPON –XGS-PON and NG-PON2 and OTDR | XCPSC02955 |
| CoEx Type 5 | CoExistence of GPON and NG-PON2 | XCPSC03187 |
| CoEx Type 6 | CoExistence of GPON -NG-PON2 and OTDR | XCPSC03188 |