PON Coexistence Passive Filter

ISP (Indoor Use)

Product Description:

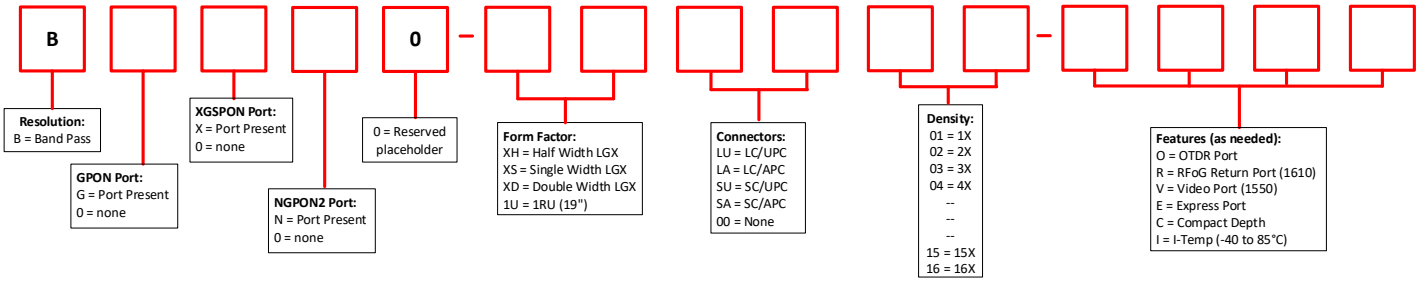
PON Coexistence Band Pass Filters with the following options:

- GPON, XGSPON, NGPON2 Ports
- Added OTDR, RFoG Return, Video, Express Ports
- Single/Dual/Twin LGX Form Factors
- UPC/APC Connectors
- Industrial Temperature Hardened

Applications:

- WDM/PON Networks, Line Monitoring, GPON/EPON Networks

Product Ordering Information



Part Number / Description Examples

Part Number	GPON Description
BG000-XSLA06-OE	Band Pass filter, GPON port, LGX Single-width, LC-APC Connectors, OTDR port, Express port, 6-in-1 Density
BG000-XSLA04-RV	Band Pass filter, GPON port, LGX Single-width, LC-APC Connectors, RFOG Return port, Video port, 4-in-1 Density

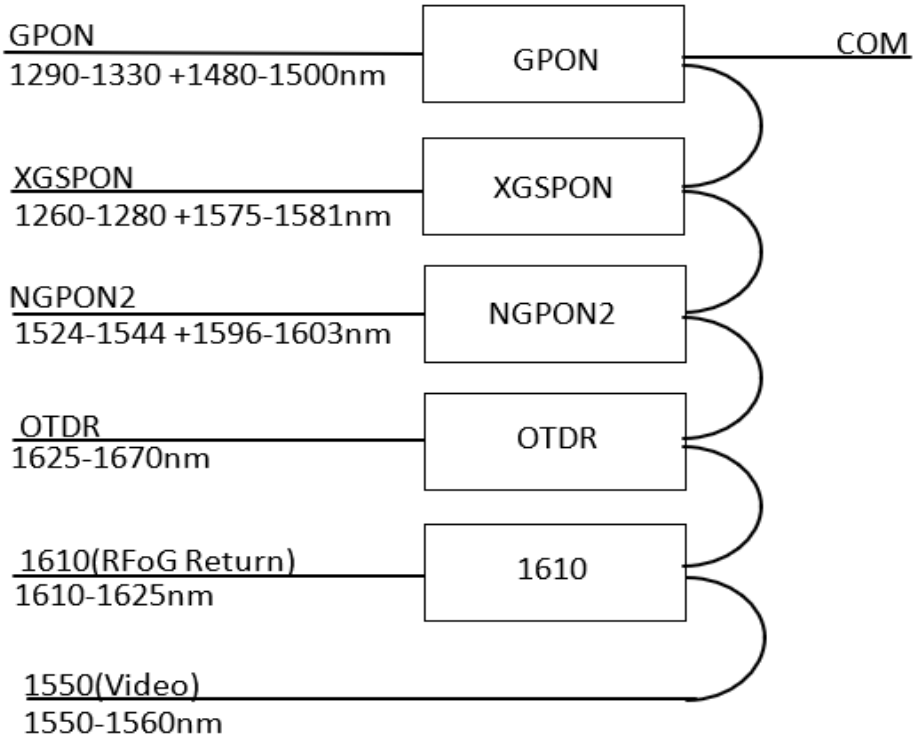
Part Number	GPON/XGSPON Description
BGX00-XSSA01-C	Band Pass filter, GPON port, XGSPON port, LGX Single-width, SC-APC Connectors, Compact Depth
BGX00-1ULU16	Band Pass filter, GPON port, XGSPON port, 1RU Rackmount x 16X Density, LC-UPC Connectors

Part Number	GPON/XGSPON/NGPON2 Description
BGXN0-XHSA01-OC	Band Pass filter, GPON port, XGSPON port, NGPON2 port, LGX Half-width, SC-APC Connectors, OTDR port, Compact Depth
BGXN1-XSLA04	Band Pass filter, GPON port, XGSPON & NGPON2 combined in a single port, LGX Single-width, LC-APC Connectors, 4-in-one Density

Optical Characteristics

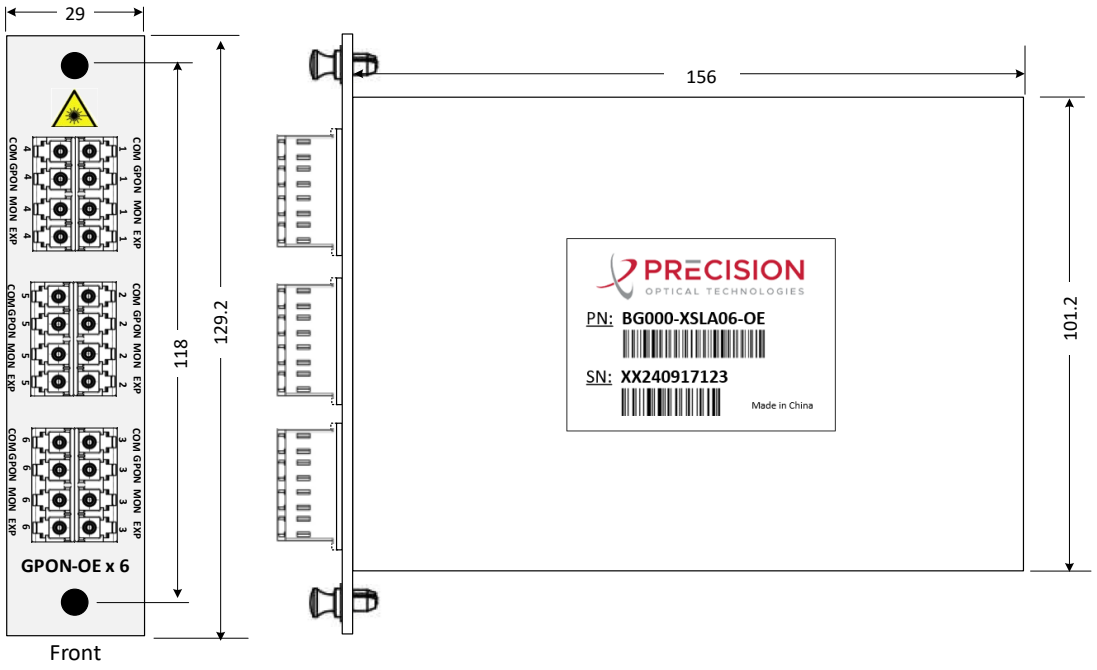
Parameter	Value	Unit
GPON Port Passband	1290-1330 & 1480-1500	nm
GPON Port Passband Insertion Loss @ -0.5dB	< 1.0	dB
GPON Port Passband Ripple @ -0.5dB	≤ 0.5	dB
GPON Port Isolation	≥ 30	dB
XGSPON Port Passband	1260-1280 & 1575-1581	nm
XGSPON Port Passband Insertion Loss @ -0.5dB	< 1.0	dB
XGSPON Port Passband Ripple @ -0.5dB	≤ 0.5	dB
XGSPON Port Isolation	≥ 30	dB
NGPON2 Port Passband	1524-1544 & 1596-1603	nm
NGPON2 Port Passband Insertion Loss @ -0.5dB	< 1.2	dB
NGPON2 Port Passband Ripple @ -0.5dB	≤ 0.5	dB
NGPON2 Port Isolation	≥ 30	dB
OTDR Port Passband	1625-1670	nm
OTDR Port Passband Insertion Loss @ -0.5dB	< 1.4	dB
OTDR Port Passband Ripple @ -0.5dB	≤ 0.5	dB
OTDR Port Isolation	≥ 30	dB
1610 (RFoG Return) Port Passband	1610-1625	nm
1610 (RFoG Return) Port Passband Insertion Loss @ -0.5dB	< 1.6	dB
1610 (RFoG Return) Port Passband Ripple @ -0.5dB	≤ 0.5	dB
1610 (RFoG Return) Port Isolation	≥ 20	dB
1550 (Video) Port Passband	1550-1560	nm
1550 (Video) Port Passband Insertion Loss @ -0.5dB	< 1.5	dB
1550 (Video) Port Passband Ripple @ -0.5dB	≤ 0.5	dB
1550 (Video) Port Isolation	≥ 20	dB
Directivity	≥ 50	dB
Return Loss	> 45	dB
Polarization Dependent Loss	< 0.2	dB
Polarization Mode Dispersion	≤ 0.2	ps
IL Thermal Stability	≤ 0.005	dB/°C
Wavelength Thermal Stability	≤ 0.002	nm/°C
Maximum Input Power	500/26.9	mW/dBm
Operating Temperature	-5 to +70	°C
Operating Humidity	0 to 95	%RH
Fiber Type (all ports)	SMF-28e (G.657.A1)	

Filter Optical Design

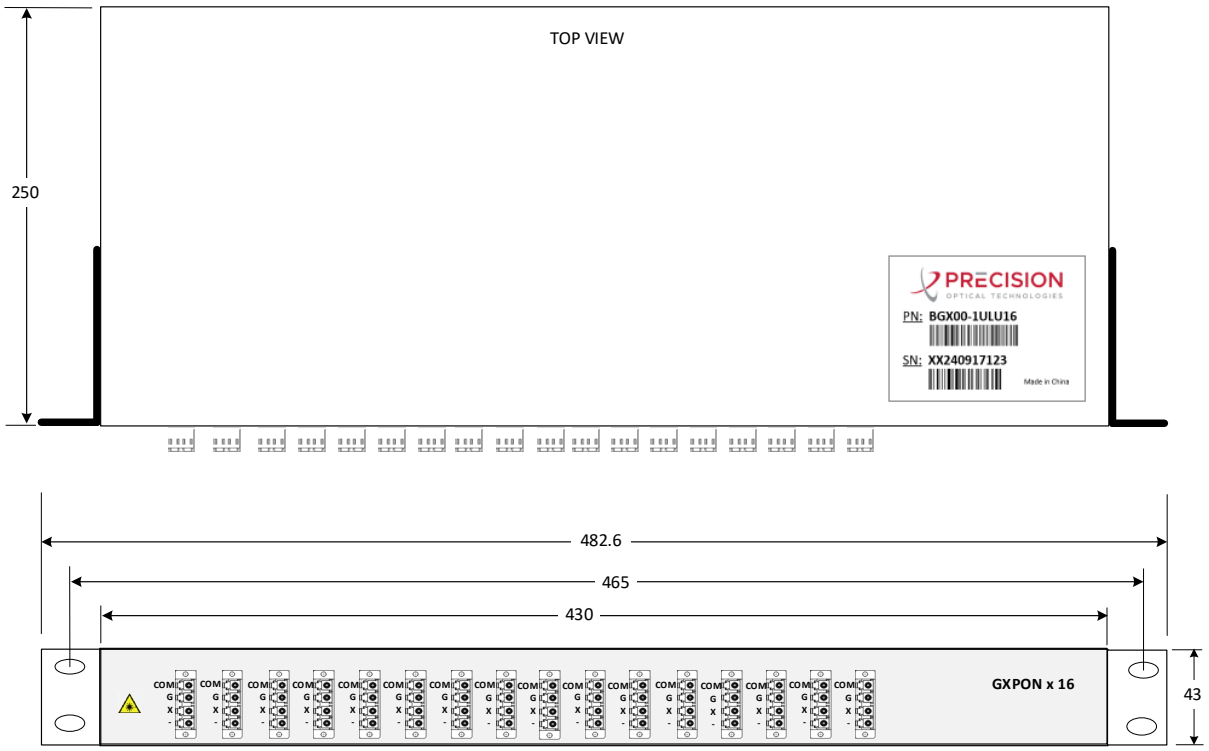


Band Pass High-Level Design
(Ports as needed follow hierarchy shown)

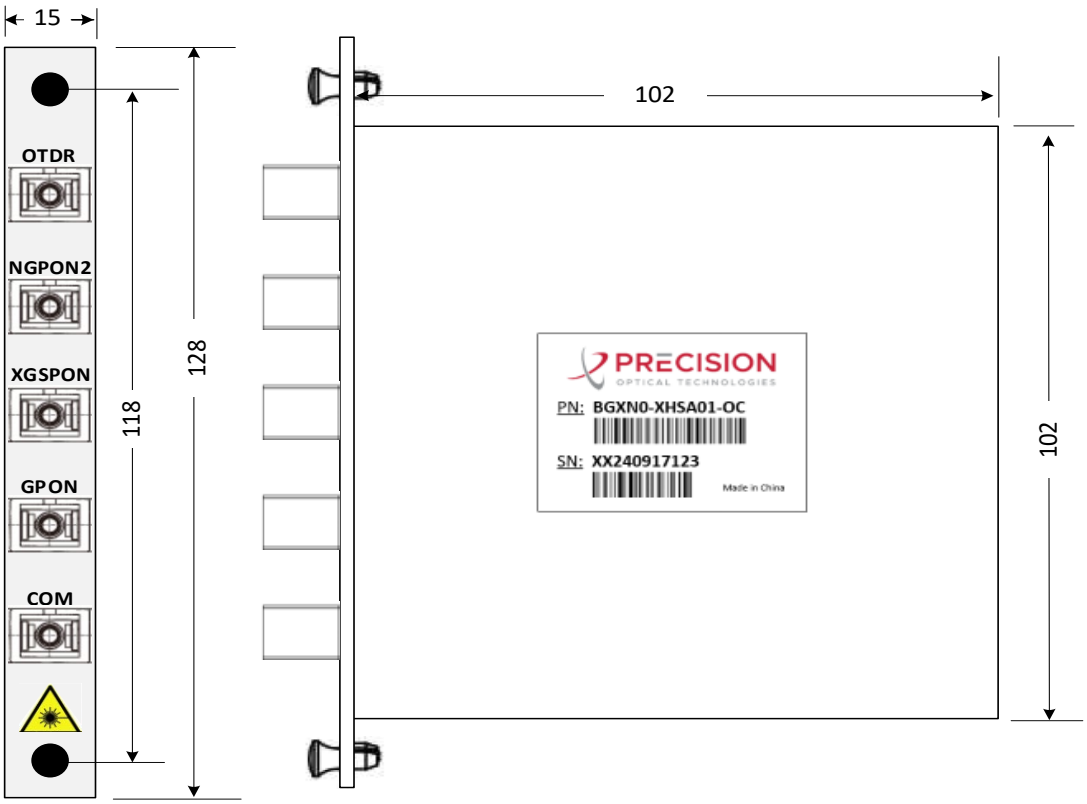
Filter Physical Design



LGX Single, GPON with OTDR & Express Port, 6X Density External Design (mm)
(BG000-XSLA06-OE shown)



1RU GPON & XGSPON Port, 16X Density External Design (mm)
(BGX00-1ULU16 shown)



LGX 1/2-width, GPON/XGSPON/NGPON2 Ports w/ OTDR Port External Design
(BGXN0-XHSA01-OC shown)