

## xPON Coexistence WDM

### Description

The Gigalight xPON coexistence WDM (Wavelength Division Multiplexing) device is designed for use in a range of PON coexistence applications. Based on the WDM technology, it uses wavelength as the identity of the Client ONU and realizes the uplink access, providing wide bandwidth, and can achieve broadband access in the true sense of symmetry. It is based on the Thin Film Filter (TFF) technology and operates at wavelengths from 1260nm to 1650nm. Gigalight provides a series of customized xPON coexistence WDM devices packaged in plastic ABS box, metal LGX box, or rack mount to meet different requirements on channel type (GPON, XG-PON1, NG-PON2, and Video), fiber type, fiber length, input connector, and output connector.

### Features

- ✓ Low Insertion Loss (IL)
- ✓ High isolation
- ✓ Low Polarization Dependent Loss (PDL)
- ✓ Up to 4 channels WDM with compact design
- ✓ Wide operating wavelength range
- ✓ High reliability and high stability
- ✓ Telcordia GR-1209-CORE-2001 compliant
- ✓ Telcordia GR-1221-CORE-1999 compliant
- ✓ RoHS-6 compliant (lead free)



### Applications

- ✓ GPON
- ✓ XG-PON1
- ✓ NG-PON2
- ✓ Video Transmission

Parameters	xPON Coexistence WDM <sup>[1]</sup>			
Channel Type	GPON	XG-PON1	NG-PON2	Video
Uplink Operating Wavelength (nm)	1290 ~ 1330	1260 ~ 1280	1524 ~ 1544	1550 ~ 1560
Downlink Operating Wavelength (nm)	1480 ~ 1500	1575 ~ 1581	1596 ~ 1603	
Insertion Loss (dB) <sup>[2]</sup>	<1.0	<1.2	<2.0	<1.5
Isolation (dB)	>30			
Directivity (dB)	>50			
Return Loss (dB)	>45			
Ripple (dB)	<0.5			
Polarization Dependent Loss (dB)	<0.2			
Polarization Mode Dispersion (ps)	<0.1			
Maximum Optical Power (mw)	300			
Operating Temperature (°C)	-5 ~ 75			
Storage Temperature (°C)	-40 ~ 85			
Package (mm)(L×W×H)	PX ABS Box: 80×58×8 Mini LGX Box: 98.8×83.8×26 19-inch 1U Rack Mount: 483×245×231			

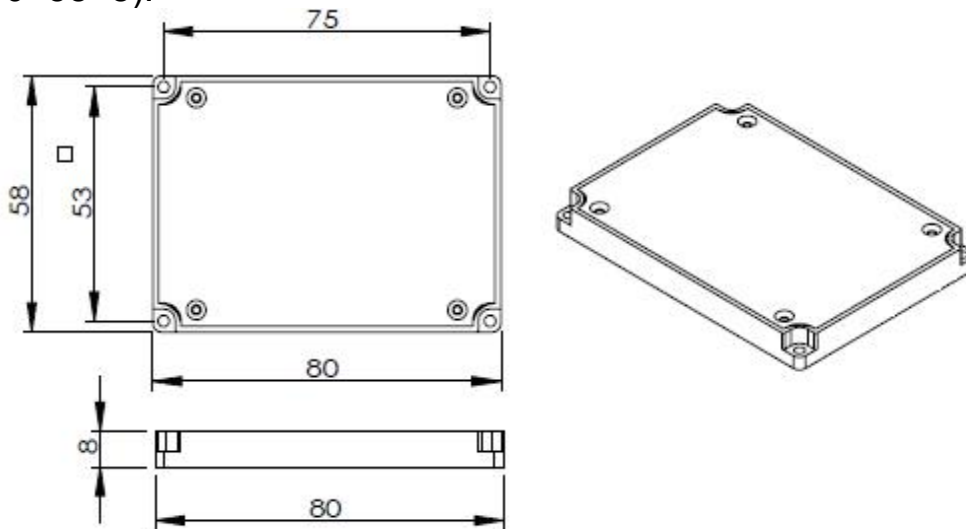
#### Note:

[1] All specifications are based on the devices without connectors, and guaranteed over wavelength and temperature. Fiber type is G657A1.

[2] An additional 0.3dB loss ought to be added per adapter for LGX box and rack mount.

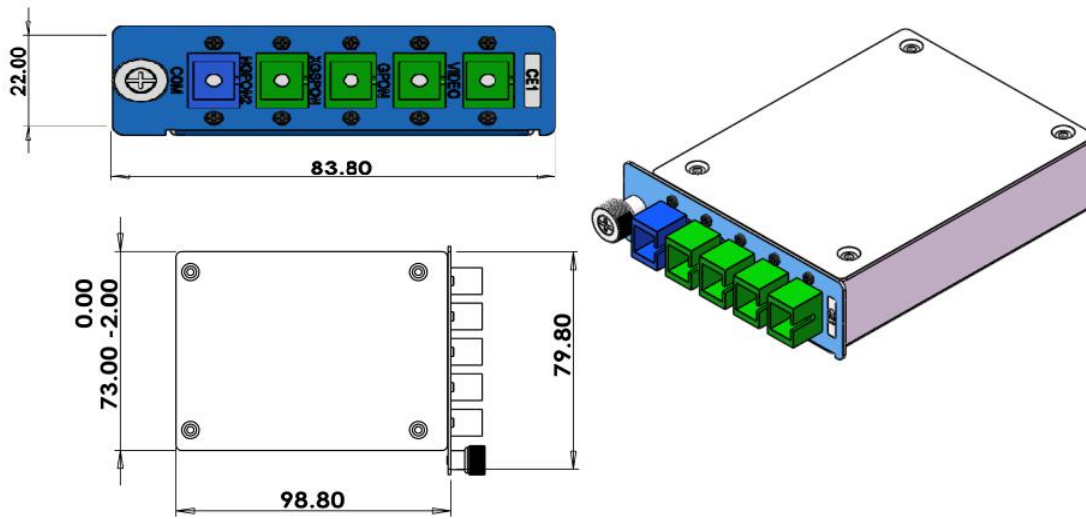
### Mechanical Dimensions

PX ABS Box (80×58×8):

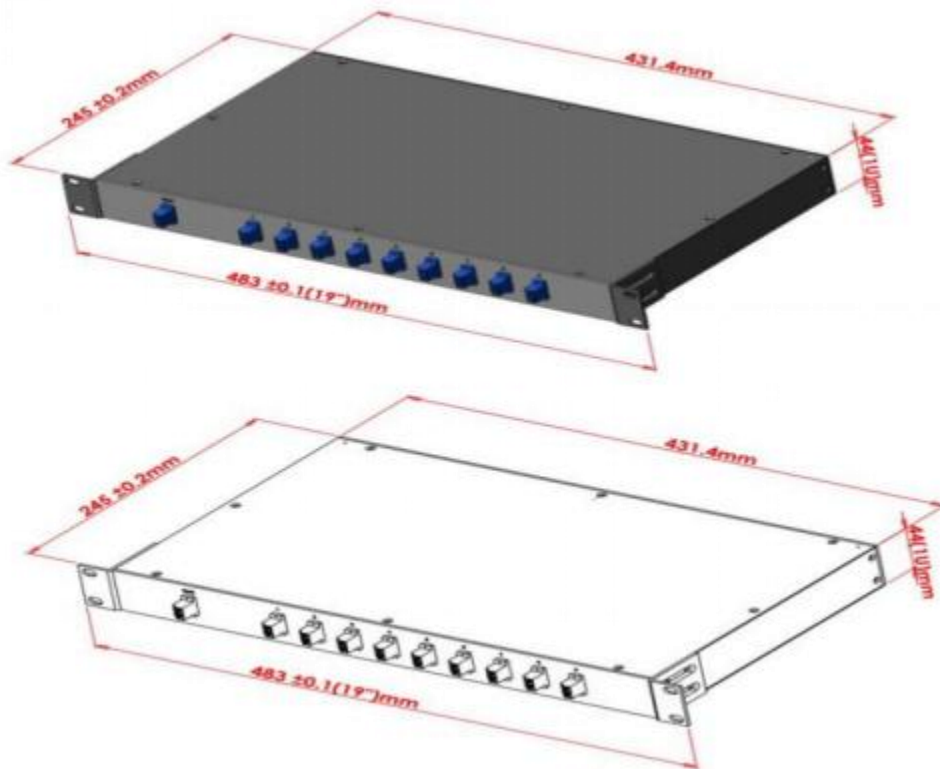


# Passive Optical Components Data Sheet

Mini LGX Box (98.8×83.8×26):



19-inch 1U Rack Mount (483×245×231):



### Ordering Information

GCWM-	xx	xx	x	xx-	x	x
	Channel Type	Package Type	Fiber Type	Fiber Length	Input Connector	Output Connector
xPON Coexistence WDM	1=GPON XG-PON1	PX=80×58×8 ABS Box	09=0.9mm loose tube	10=1.0m	0=None	0=None
	2=GPON XG-PON1 NG-PON2	LX=98.8×83.8×26 Mini LGX Box	20=2.0mm loose tube	15=1.5m	1=FC/UPC	1=FC/UPC
	3=GPON XG-PON1 NG-PON2 Video	19=483×245×231 19-inch 1U Rack Mount	30=3.0mm loose tube	20=2.0m	2=FC/APC	2=FC/APC
				25=2.5m	3=SC/UPC	3=SC/UPC
				...	4=SC/APC	4=SC/APC
					5=LC/UPC	5=LC/UPC
					6=LC/APC	6=LC/APC

**Note :**

If there is a demand for orders that are different from those described above, please contact Gigalight sales.

E-mail: [sales@gigalight.com](mailto:sales@gigalight.com)

Official Site: [www.gigalight.com](http://www.gigalight.com)