

## CWDM MUX/DEMUX

### ABS/LGX Box & Rack Mount

#### Description

The Gigalight CWDM MUX/DEMUX (Multiplexer/Demultiplexer) is a multi-channel CWDM device designed for cost-effective multi-wavelength CWDM network applications. It is based on the Thin Film Filter (TFF) technology and operates at 20nm channel spacing ITU Grid CWDM wavelengths from 1270nm to 1610nm. Gigalight provides a series of customized CWDM MUX/DEMUX devices packaged in plastic ABS box, metal LGX box, or rack mount to meet different requirements on port configuration (1310nm, upgrade, and monitoring ports available), operating wavelength, package type, fiber type, fiber length, input connector, and output connector.

#### Features

- ✓ Low Insertion Loss (IL)
- ✓ High isolation
- ✓ Low Polarization Dependent Loss (PDL)
- ✓ Up to 18 channels CWDM with compact design
- ✓ Good channel-to-channel uniformity
- ✓ Wide operating wavelength range
- ✓ High reliability and high stability
- ✓ Telcordia GR-1209-CORE-2001 compliant
- ✓ Telcordia GR-1221-CORE-1999 compliant
- ✓ ITU-T G.694.1 compliant
- ✓ RoHS-6 compliant (lead free)

*ABS Box*



*19-inch 1U Rack Mount*



#### Applications

- ✓ Broadband Networks
- ✓ Metro Networks
- ✓ CATV Systems

### Specifications

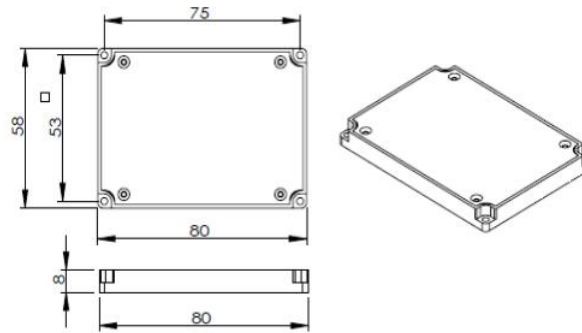
Parameters	CWDM MUX/DEMUX				
Port Configuration	1×2	1×4	1×8	1×16	1×18
Center Wavelength (nm)	1270~1610				
Operating Wavelength (nm)	1260~1620				
Channel Space (nm)	20				
Channel Passband @0.5dB (nm)	ITU±6.5				
Channels Insertion Loss (dB)	<1.2	<1.8	<3.0	<3.4	<3.7
Link Insertion Loss (Mux+Demux) (dB)	<2.1	<2.7	<3.9	<4.6	<5.3
Adjacent Channels Isolation (dB)	>30				
Non-Adjacent Isolation (dB)	>45				
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)	ABS Box: 80×58×8 LGX Box: standard, 2 in 1, 4 in1 19-inch 1U Rack Mount: standard				

#### Note:

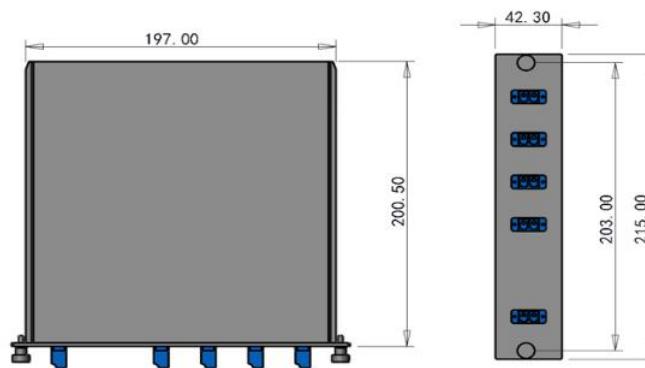
- 1) All specifications are based on the devices with connectors, and guaranteed over wavelength and temperature. Fiber type is G657A.
- 3) An additional 0.3dB loss ought to be added per adapter for LGX box and rack mount.

### Mechanical Dimensions

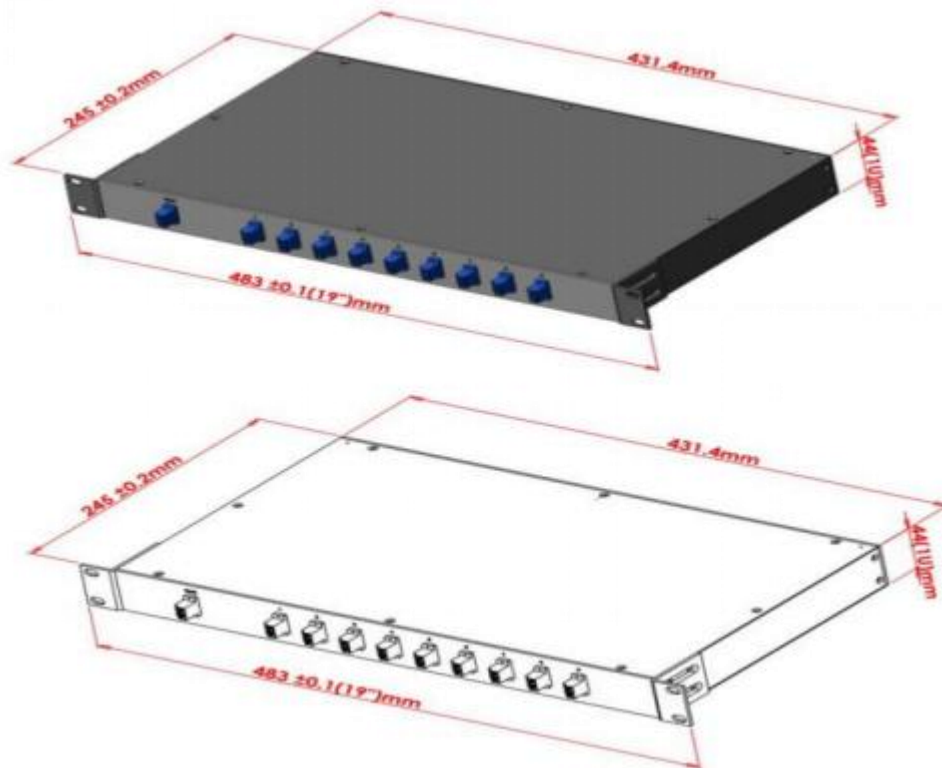
PX ABS Box (80×58×8):



LGX Box 2 in 1:



19-inch 1U Rack Mount:



### Ordering Information

GWM-xxQ	x	xx	xx	x	xx-	x	x
	MUX/DEMUX Type	Initial Wavelength	Package Type	Fiber Type	Fiber Length	Input Connector	Output Connector
<b>CWDM</b> <b>MUX/DEMUX</b> <b>xx:</b> <b>02=2CH</b> <b>...</b> <b>18=18CH</b>	M=MUX	27=1270	PX=80×58×8 ABS Box	B=250um bare fiber	10=1.0m	0=None	0=None
	D=DEMUX	29=1290	PS=100×80×10 ABS Box	09=0.9mm loose tube	15=1.5m	1=FC/UPC	1=FC/UPC
	1=MUX with 1310nm port	...	PM=120×80×18 ABS Box	20=2.0mm loose tube	20=2.0m	2=FC/APC	2=FC/APC
	2=DEMUX with 1310nm port		PL=140×115×18 ABS Box		25=2.5m	3=SC/UPC	3=SC/UPC
	3=MUX with UPG port		LX=Standard LGX Box		...	4=SC/APC	4=SC/APC
	4=DEMUX with UPG port		21=2 in 1 LGX Box			5=LC/UPC	5=LC/UPC
	5=MUX with 1310nm & UPG ports		41=4 in 1 LGX Box			6=LC/APC	6=LC/APC
	6=DEMUX with 1310nm & UPG ports		19=19-in 1U Rack Mount				
	7=MUX with 1310nm & MON ports						
	8=DEMUX with 1310nm & MON ports						

**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)