

CCWDM MUX/DEMUX

Description

The GigaLight CCWDM (Compact CWDM) MUX/DEMUX is a multi-channel CWDM device with compact package designed for cost-effective multi-wavelength CWDM network applications. It is based on the Thin Film Filter (TFF) technology and free-space technology platform. It operates at 20nm channel spacing ITU Grid CWDM wavelengths from 1270nm to 1610nm. GigaLight provides a series of customized CCWDM MUX/DEMUX devices packaged in metal box to meet different requirements on port configuration (1310nm, upgrade, and monitoring ports available), operating wavelength, 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 CCWDM 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.694.2 compliant
- ✓ RoHS-6 compliant (lead free)

18CH CCWDM with A5 Metal Box Package



Applications

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

Parameters	CCWDM MUX/DEMUX ^[1]			
	1×4	1×8	1×12	1×18
Port Configuration	1×4	1×8	1×12	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) ^[2]	<1.2	<1.5	<2.0	<2.5
Adjacent Channels Isolation (dB)	>30			
Non-Adjacent Isolation (dB)	>40			
Directivity (dB)	>50			
Return Loss (dB)	>45			
Ripple (dB)	<0.4			
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)	A2 Metal Box: 45×25×8		A5 Metal Box: 50×50×8	

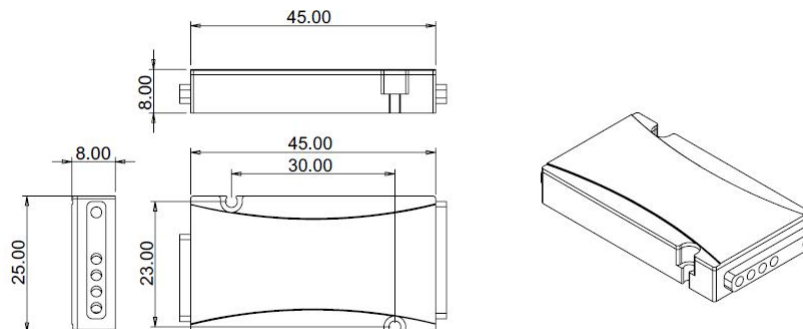
Note:

[1] All specifications are based on the devices with 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.

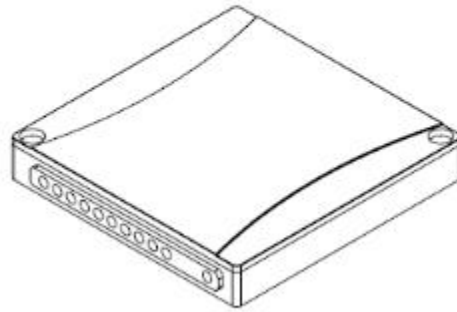
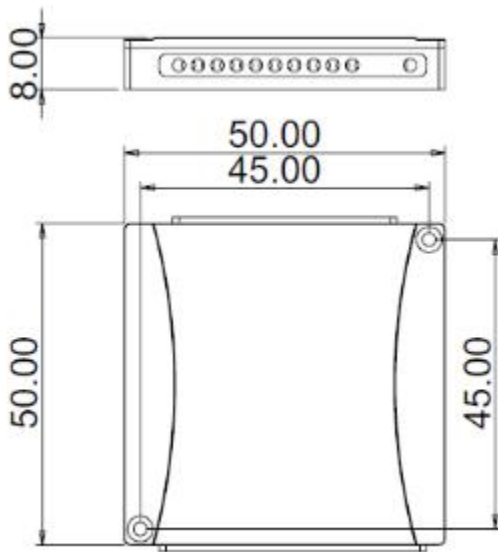
Mechanical Dimensions

A2 Metal Box (45×25×8):



Passive Optical Components Data Sheet

A5 Metal Box (50×50×8):



Ordering Information

GCC-xxQ	x	xx	xx	x	xx-	x	x
	MUX/DEMUX Type ^[1]	Initial Wavelength	Package Type ^[2]	Fiber Type	Fiber Length	Input Connector	Output Connector
CCWDM MUX/DEMUX xx: 02=2CH ... 18=18CH	M=MUX	27=1270	A2=45×25×8 Metal Box	B=250um bare fiber	10=1.0m	0=None	0=None
	D=DEMUX	29=1290	A5=50×50×8 Metal Box	09=0.9mm loose tube	15=1.5m	1=FC/UPC	1=FC/UPC
	1=MUX with 1310nm port	31=1310		20=2.0mm loose tube	20=2.0m	2=FC/APC	2=FC/APC
	2=DEMUX with 1310nm port	...		30=3.0mm loose tube	25=2.5m	3=SC/UPC	3=SC/UPC
	3=MUX with UPG port	55=1550			...	4=SC/APC	4=SC/APC
	4=DEMUX with UPG port	57=1570				5=LC/UPC	5=LC/UPC
	5=MUX with 1310nm & UPG ports	59=1590				6=LC/APC	6=LC/APC
	6=DEMUX with 1310nm & UPG ports						

Note :

[1] The 1310 in the "MUX/DEMUX Type" is 1310±50nm;

[2] The package type "A2" are designed for 2 to 9-channel CCWDM, and the "A5" for 10 to 18-channel CCWDM. Other package types such as LGX box and 19-inch 1U rack mount can be customized.

Passive Optical Components

Data Sheet



Optical Interconnection Design Innovator

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

E-mail: sales@gigalight.com

Official Site: www.gigalight.com