

# Dense Wavelength Division Multiplexing Optical Add/Drop Multiplexer (DWDM OADM)

## Features

- ✓ Low Insertion Loss (IL)
- ✓ High isolation
- ✓ Low Polarization Dependent Loss (PDL)
- ✓ Available in 1 to 8 channels with compact design
- ✓ 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)



## Description

The Gigalight Dense Wavelength Division Multiplexing Optical Add/Drop Multiplexer (DWDM OADM) is designed for ITU channel spacing applications. It is based on the Thin Film Filter (TFF) technology and operates at 100GHz or 200GHz channel spacing ITU Grid DWDM wavelengths from 1526nm to 1565nm. Gigalight provides a series of customized DWDM OADM within plastic ABS box, metal LGX box, or rack mount to meet different requirements on Port Configuration, Operating Wavelength, Package Type, Fiber Type, Fiber Length, Input Connector, and Output Connector.

## Specifications

Parameters	DWDM OADM							
	1CH	2CH	3CH	4CH	5CH	6CH	7CH	8CH
Port Configuration	1CH	2CH	3CH	4CH	5CH	6CH	7CH	8CH
Center Wavelength (nm)	ITU Grid							
Operating Wavelength (nm)	1525 to 1565							
Channel Space (nm)	0.8							
Passband @0.5dB (nm)	ITU±0.11							
Add/Drop Channel IL (dB)	< 1.2	< 1.6	< 1.8	< 2.0	< 2.2	< 2.4	< 2.8	< 3.2
Input/Output Channel IL (dB)	< 1.0	< 1.6	< 1.8	< 2.2	< 3.2	< 3.4	< 3.8	< 4.0
Adjacent Channels Isolation (dB)	> 30							
Non-Adjacent Isolation (dB)	> 40							
Express Channel Isolation (dB)	> 20							
Directivity (dB)	> 50							
Return Loss (dB)	> 45							
Ripple (dB)	< 0.3				< 0.4		< 0.5	
PDL (dB)	< 0.1							
PMD (ps)	< 0.1							
Maximum Optical Power (mw)	300							
Operating Temperature (°C)	-5 to +75							

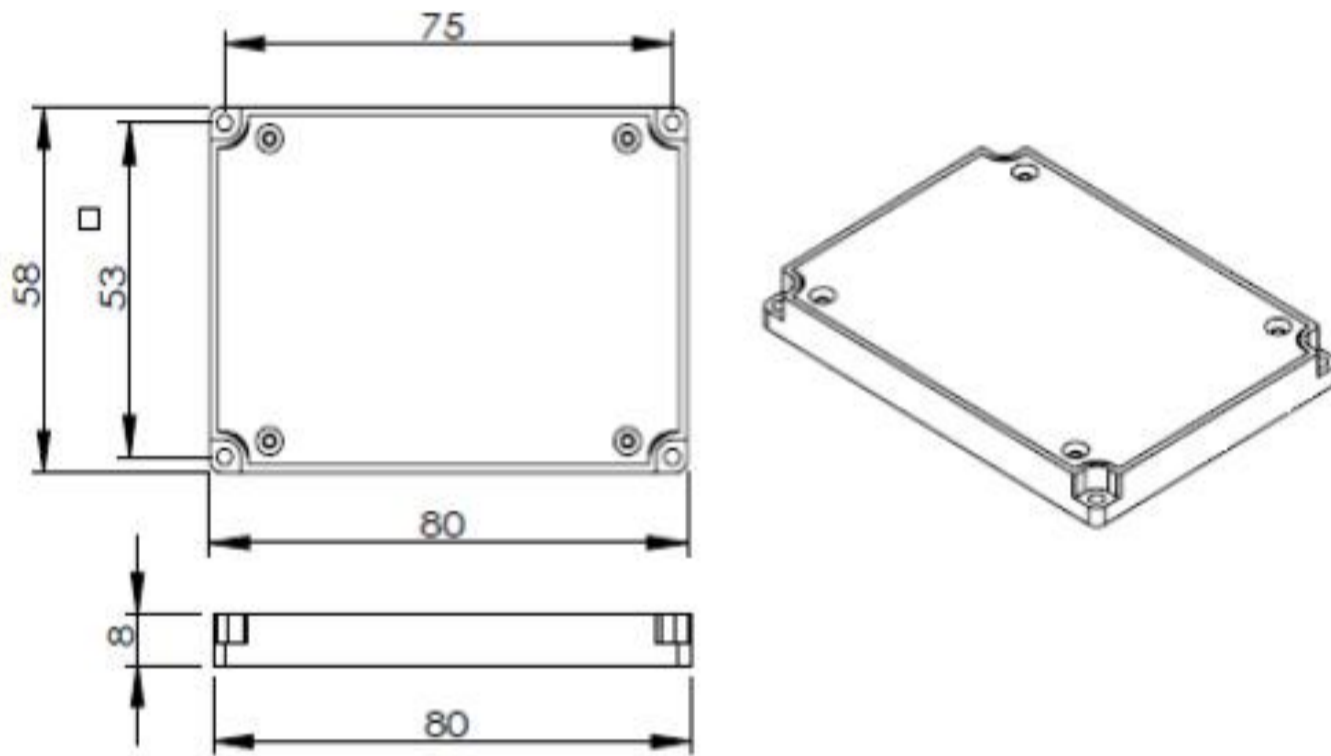
Storage Temperature (°C)	-40 to +85
Package (mm) (L×W×H)	ABS Box: 80×58×8, 100×80×10, 120×80×18, 140×115×18 LGX Box: standard, 2 in 1, 4 in 1 19-inch 1U Rack Mount: standard

**Notes:**

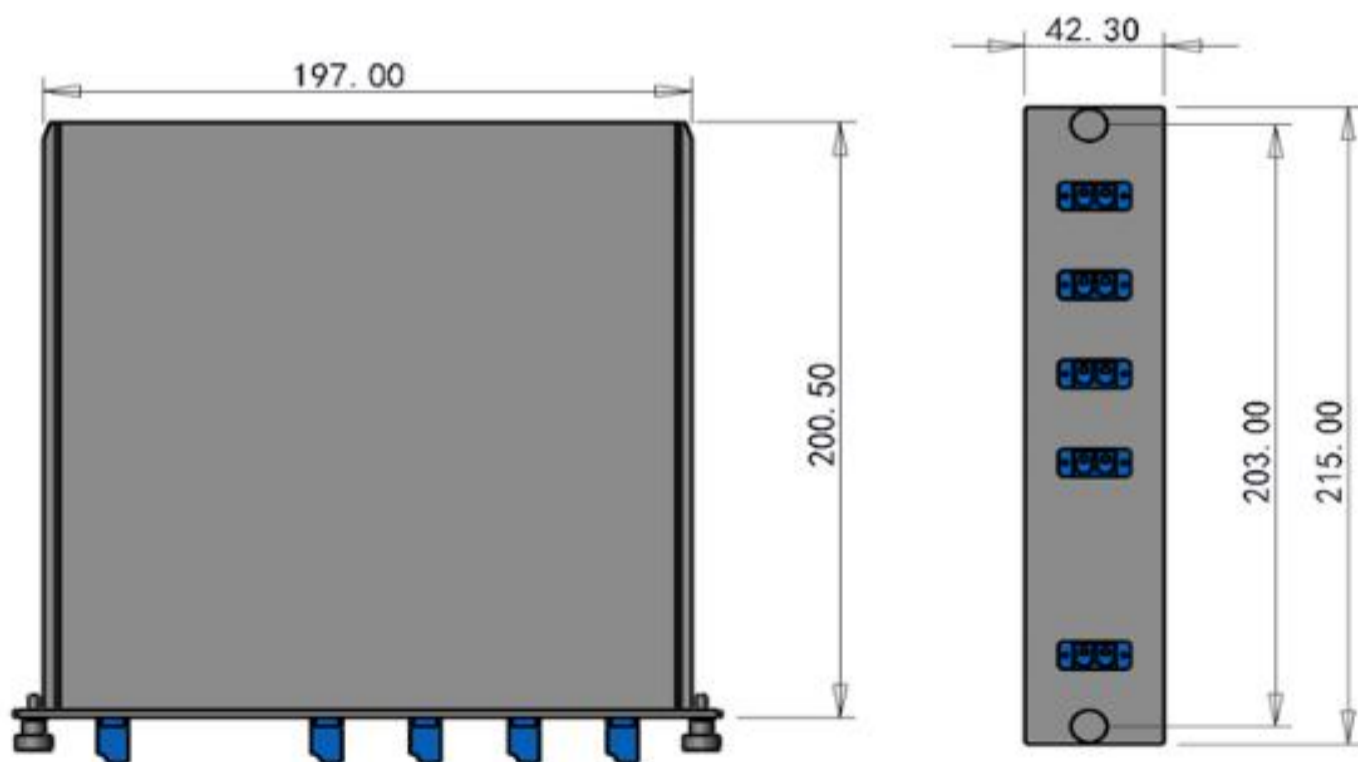
1. All specifications are based on the devices with connectors, and guaranteed over wavelength and temperature.
2. Fiber type is G657A1 with 0.9mm loose tube.
3. An additional 0.3dB loss ought to be added per adapter for LGX box and rack mount.

**Mechanical Dimensions**

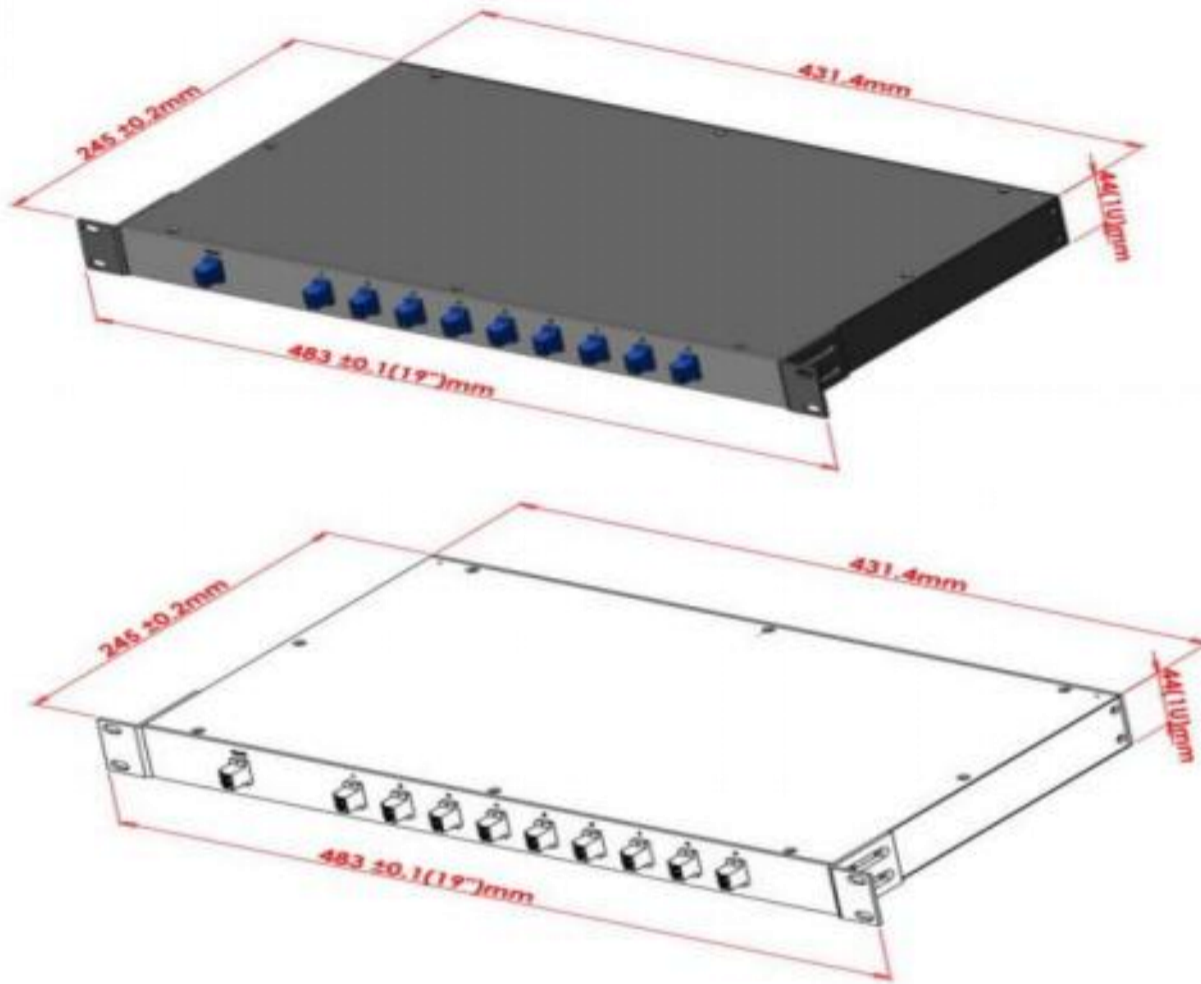
ABS Box (PX: 80×58×8):



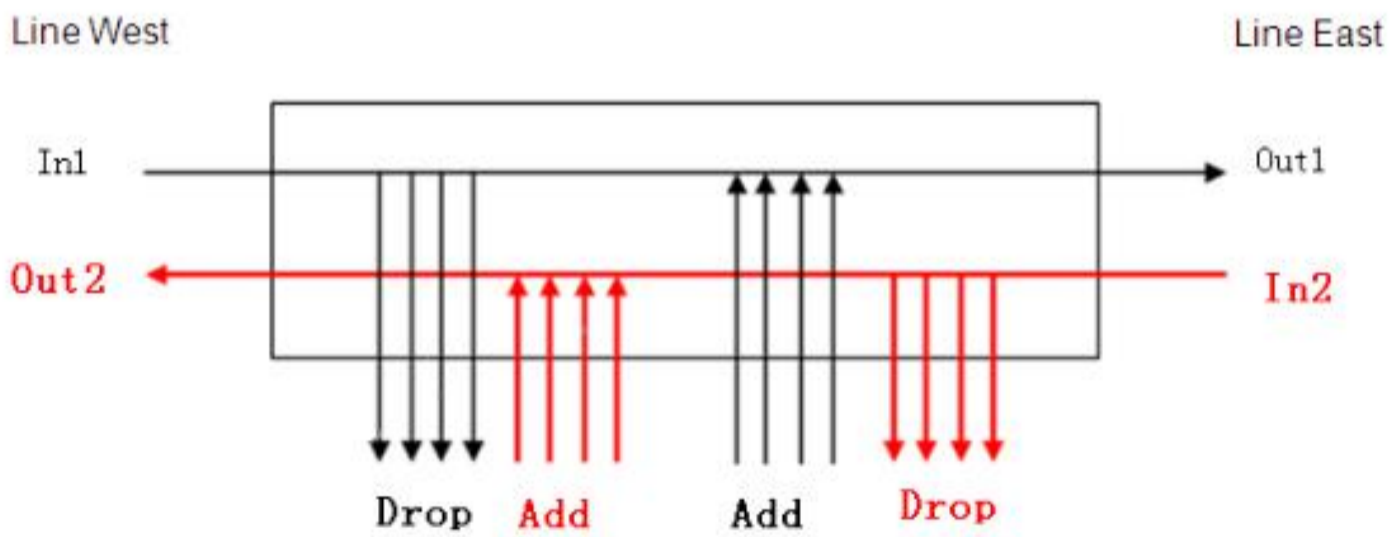
LGX Box (2 in 1):



19-inch 1U Rack Mount:



**Structure Diagram**



**Ordering Information**

GADM-x	x	xx	xx	x	xx-	x	x	x
	Channel Space	Initial Wavelength	Package Type	Fiber Type	Fiber Length	Input Connector	Add/Drop Connector	Output Connector
<b>Channel Options</b> <b>x:</b> 1=1CH 2=2CH 3=3CH 4=4CH 5=5CH 6=6CH 7=7CH 8=8CH	X=100GHz	15=15CH	PX=80×58×8 ABS Box	B=250um bare fiber	10=1.0m	0=None	0=None	0=None
	Y=200GHz	16=16CH	PS=100×80×10 ABS Box	09=0.9mm loose tube	15=1.5m	1=FC/UPC	1=FC/UPC	1=FC/UPC
		17=17CH	PM=120×80×18 ABS Box	20=2.0mm loose tube	20=2.0m	2=FC/APC	2=FC/APC	2=FC/APC
		...	PL=140×115×18 ABS Box	30=3.0mm loose tube	25=2.5m	3=SC/UPC	3=SC/UPC	3=SC/UPC
		61=61CH	LX=Standard LGX Box		...	4=SC/APC	4=SC/APC	4=SC/APC
		62=62CH	21=2 in 1 LGX Box			5=LC/UPC	5=LC/UPC	5=LC/UPC
		63=63CH	41=4 in 1 LGX Box			6=LC/APC	6=LC/APC	6=LC/APC
		64=64CH	19=19-in 1U Rack Mount					

**Notes:**

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)