

[OEFBG-WDM-MUX]

DWDM Add/Drop Multiplexor (Multiple channels, Division multiplexor) 12.5/25/50/100/200 GHz

Features:

- Multi-channel
- Centre wavelength on ITU grid, or customer specified
- SM or PM-fibers
- Connector: FC-SC-LC/PC; FC-SC-LC /APC
- Multi-port device in a single box
- With integrated optical circulators
- Best specifications available in the industry
- Cost effective

Applications:

- DWDM Optical System
- Add/Drop modules
- CATV systems
- Testing and Lab research
- Fiber Instrumentation
- Fiber Sensor
- Biomedical applications

Product description:

The multi-channel FBG-DWDM-MUX Division Multiplexor is based on our advanced Fiber Bragg Grating (FBG) filter technology and has multiple ports for multiplexing or demultiplexing. The available number of the channels up to 8, in port configuration of 1x9. One of the main significances of this device is the flexibility to choose the number of channels and wavelengths, which can be any from the ITU grid or customer specified in the S, C and L-band ranges. This device can be used to multiplex or demultiplex from 2 to 8 channels at the same time. The channels spacing can be chosen from 6.25 GHz, 12.5 GHz, 25 GHz, 50 GHz, 100 GHz and 200 GHz.

Custom devices with up to 32 channels, as well as custom channel spacing and bandwidths, are available upon request.

Product schematic (example, for 1x6, 6-channels MUX/DEMUX module):

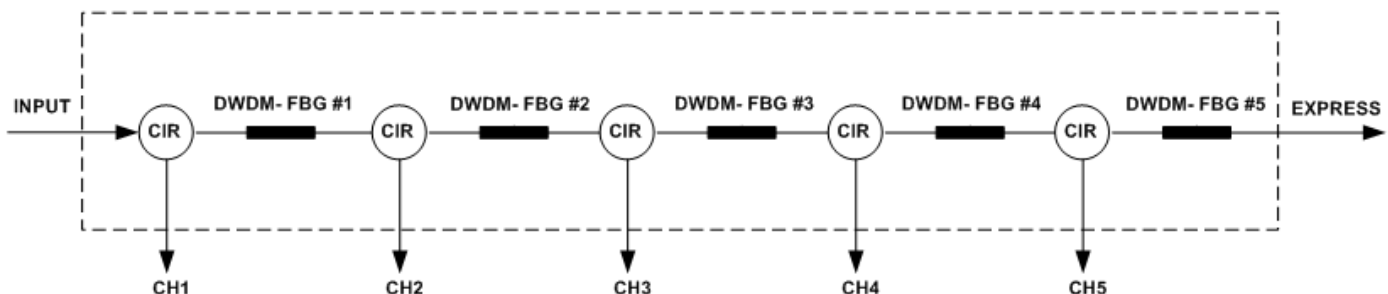


Figure 1. Configuration

Product specifications:

Parameter		Unit	Value
Type			FBG-DWDM Division Multiplexor, multi-channel, with integrated circulators, multi-ports device
Port configuration			1x3, 1x4, 1x5, 1x6, 1x7, 1x8, 1x9
Channels number			2, 3, 4, 5, 6, 7, 8
Channels Wavelengths			ITU grid; Custom: 1520-1675 nm
Wavelength accuracy		nm	± 0.05
Wavelength stability*		pm/°C	< 1.0
Reflection Bandwidth @ -25dB**	6.25 GHz	nm	< 0.06
	12.5 GHz		< 0.13
	25 GHz		< 0.25
	50 GHz		< 0.5
	100 GHz		< 1.0
	200 GHz		< 2.0
Isolation		dB	> 25
Insertion loss	Input -> Express	dB	depending on the number of channels
	Input -> Channel		depending on the number of channels
Box dimensions		mm	depending on the channel spacing
Operating temperature		°C	0 to 60
Storage temperature		°C	-40 to 85

* Athermal package for the FBG-DWDM is required.

Product spectrum (example, for 1x5, 5-channels MUX/DEMUX module):

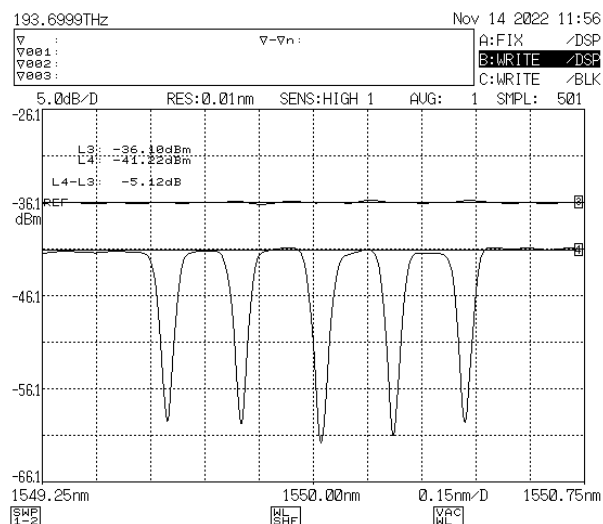
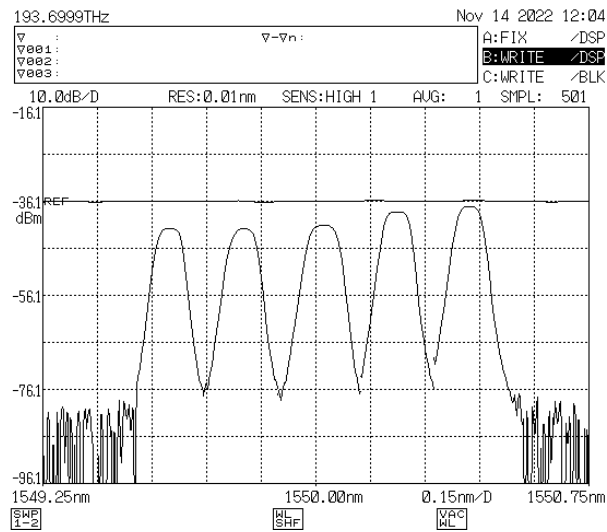


Figure 2. Transmission Spectrum



OEFBG-WDM-MUX-025 (25 GHz FBG-DWDM Division Multiplexor)

Figure 3. Reflection Spectrum

Ordering number for OEFBG-WDM-MUX:

Channel spacing	Number of channels	CWL (nm)	FBG Package	Pigtail type	Connector	Fiber Length
012 (12.5 GHz) 025 (25 GHz) 050 (50 GHz) 100 (100 GHz) 200 (200 GHz)	1 to 32	Center Wavelength	None P1 Athermal P2	900 Tubing T1 3mm Jacket T2	FC/PC C1	Default: 1m Custom: indicate value
FC/APC C2						
SC/PC C3						
SC/APC C4						
LC/PC C5						
					LC/APC C6	
Example:	OEFBG-WDM-MUX-100-4-1550.12-P2-T1-C2-1					

Note: Customers who use Fiber Bragg Gratings (FBGs) or incorporate them with their own products, must buy their FBGs from a licensed manufacturer.
O/E LAND INC. has full **License Agreement from CRC/UTC Fiber Bragg Grating Technologies Portfolio**.