[OEWDM-100]

# DWDM-FBG 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:**

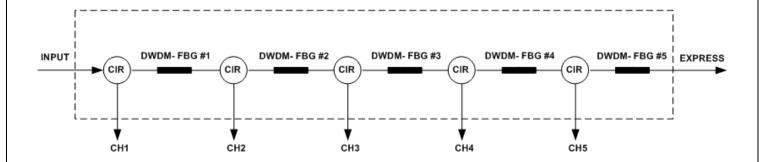
- DWDM Optical System
- Add/Drop modules
- CATV systems
- Testing and Lab research
- Fiber Instrumentation
- Fiber Sensor
- Biomedical applications

## Product description:

The multi-channel DWDM-FBG 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 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, 5-channels MUX/DEMUX module):



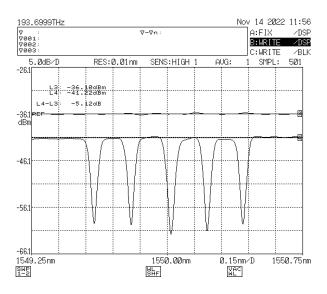


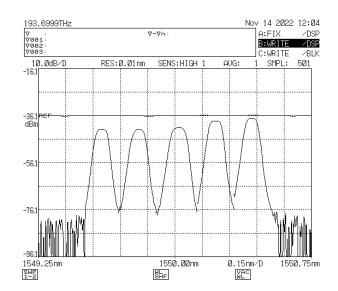
# Product specifications:

Parameter		Unit	Value			
Туре			DWDM-FBG 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 Wavelengt	ths		ITU grid; Custom: 1520-1675 nm			
Wavelength accurac	у	nm	± 0.05			
Wavelength stability*		pm/°C	< 1.0			
Reflection Bandwidt	: <b>h</b> 12.5 GHz	nm	< 0.1			
@-25dB**	25 GHz		< 0.2 < 0.4 < 0.8			
	50 GHz					
	100 GHz					
	200 GHz		< 1.2			
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 temperat	ure	°C	0 to 60			
Storage temperature	e	°C	-40 to 85			

<sup>\*</sup> Athermal package for the DWDM-FBG is required.

## Product spectrum (example, for 1x5, 4-channels MUX/DEMUX module):





OEDWDM-100 (25 GHz DWDM-FBG Division Multiplexor)



# Ordering number for OEWDM-100:

	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)	1 to 8	Center Wavelength	None Athermal	P1 P2	900 Tubing 3mm Jacket	T1 T2	FC/PC FC/APC SC/PC SC/APC	C1 C2 C3 C4	Default: 1m Custom: indicate value
200 (200 GHz)	OFWDM 100 A	1550.120-P2-T1-C	~ 1				LC/PC LC/APC	C5 C6	

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.