

[OEWD-100]

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:

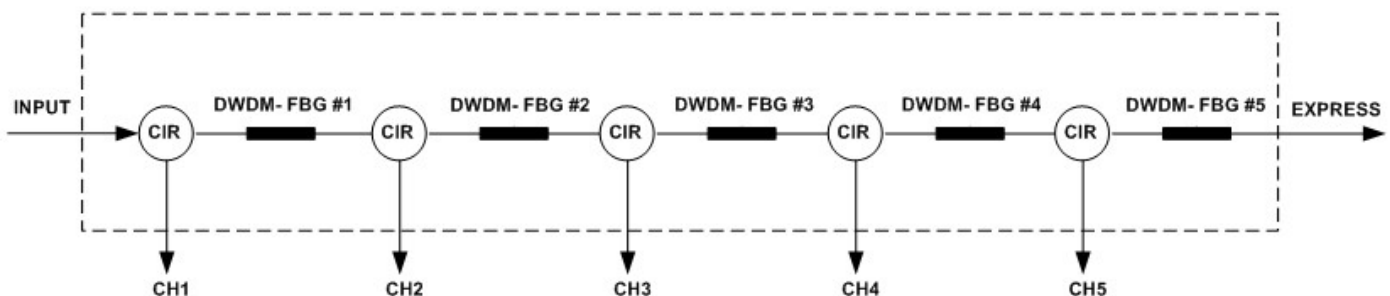
- DWDM Optical System
- Add/Drop modules
- CATV systems
- Testing and Lab research
- Fiber Instrumentation
- Fiber Sensor
- Biomedical applications

Product description:

The multi-channel 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.

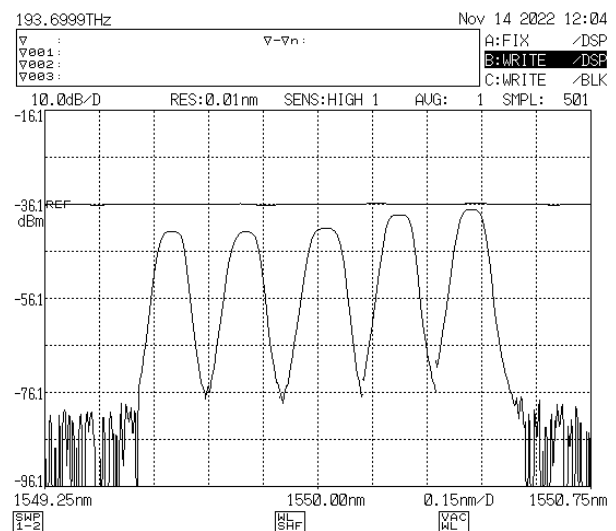
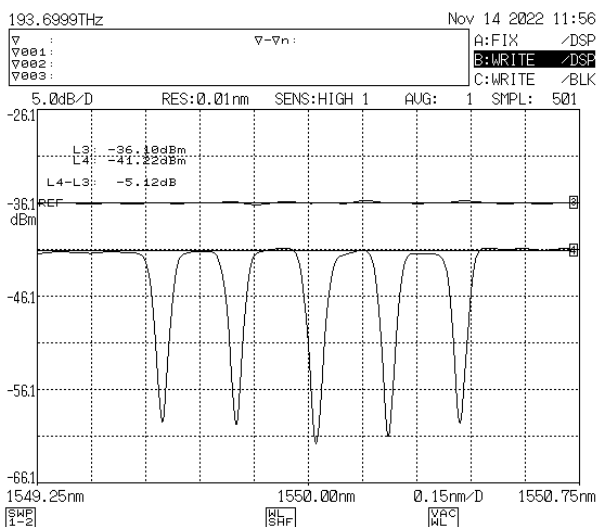
Product schematic (example, for 1x6, 5-channels MUX/DEMUX module):



Product specifications:

| Parameter | Unit | Value | |
|-------------------------------|------------------|---|-------------------------------------|
| Type | | 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 Wavelengths | | ITU grid; Custom: 1520-1675 nm | |
| Wavelength accuracy | nm | ± 0.05 | |
| Wavelength stability* | pm/°C | < 1.0 | |
| Reflection Bandwidth @-25dB** | 12.5 GHz | nm | < 0.1 |
| | 25 GHz | | < 0.2 |
| | 50 GHz | | < 0.4 |
| | 100 GHz | | < 0.8 |
| | 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 temperature | °C | 0 to 60 | |
| Storage temperature | °C | -40 to 85 | |

* 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 OEWD-100:

| Channel spacing | Number of channels | CWL (nm) | FBG Package | Pigtail type | Connector | Fiber Length | | | |
|-----------------|--------------------------------|-------------------|-------------|--------------|------------|--------------|--------|----|---------------------------------------|
| 012 (12.5 GHz) | 1 to 8 | Center Wavelength | None | P1 | 900 Tubing | T1 | FC/PC | C1 | Default: 1m Custom: indicate value |
| 025 (25 GHz) | | | Athermal | P2 | 3mm Jacket | T2 | FC/APC | C2 | |
| 050 (50 GHz) | | | | | | | SC/PC | C3 | |
| 100 (100 GHz) | | | | | | | SC/APC | C4 | |
| 200 (200 GHz) | | | | | | | LC/PC | C5 | |
| LC/APC | C6 | | | | | | | | |
| Example: | OEWD-100-4-1550.120-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.**