

Optical Demultiplexer/Multiplexer (ODM)

The ODM (Optical Demultiplexer/Multiplexer) board is a CWDM (Coarse Wavelength Division Multiplexing) / DWDM (Dense Wavelength Division Multiplexing) multiplexer launched by FIBERWDM. It can combine or separate the channels of CWDM or DWDM systems, greatly saving the fiber resources of customers, and the network configuration can be flexibly changed according to customer requirements.

For DWDM systems with a frequency spacing of 100GHz, it supports smooth upgrade to 48 wavelength channels. For DWDM systems with a frequency spacing of 75GHz, it supports smooth upgrade to 64 wavelength channels. For DWDM systems with a frequency spacing of 50GHz, it supports smooth upgrade to 96 wavelength channels. For CWDM systems, it supports smooth upgrade to 18 wavelength channels.

The use of the ODM device can improve the spectrum utilization of the fiber and save precious bandwidth resources.

Product Introduction

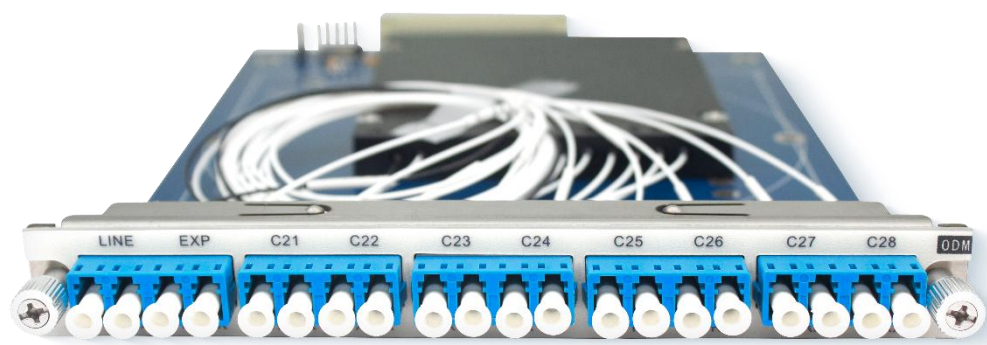


Fig. 1 ODM Optical Demultiplexer/Multiplexer Board

Product Features

- ◆ Supports smooth upgrade of CWDM system to 18-channel customization.
- ◆ Supports smooth upgrade of DWDM system to 96-channel customization.
- ◆ Completely passive, no power supply or adjustment required, transparent transmission.
- ◆ Supports online capacity expansion and upgrade, simple maintenance, easy operation.
- ◆ Supports CWDM and DWDM (100GHz/75GHz/50GHz) applications.
- ◆ Supports various application scenarios such as single fiber unidirectional, single fiber bidirectional, and dual fiber bidirectional.
- ◆ Low insertion loss, high channel isolation, high reliability and stability, compliant with GR-1221 standard.

Product Specifications

System Parameters	Technical Specifications
Wavelength Range	CWDM: 1271~1611nm DWDM: C-Band (100GHZ/75GHZ/50GHZ)
Channel Spacing	CWDM: 20nm DWDM: 0.8nm/0.6nm/0.4nm
Passband Width	CWDM: $\pm 6.5\text{nm}$ DWDM: 0.1nm
Passband Flatness	<0.5dB@flat-top <0.5dB@gaussian
Channel Insertion Loss	4CH: <1.0dB、6CH: <2.0dB、8CH: <2.5dB 12CH: <2.8dB、16CH: <3.2dB、40CH: <6dB 48CH: <6dB、80CH: <6dB、96CH: <7dB
Adjacent Channel Isolation	>25dB

Non-Adjacent Channel Isolation		>30dB
Polarization Dependent Loss		<0.5dB
Polarization Mode Dispersion		<0.1ps
Return Loss		>45dB
Maximum Input Optical Power		>300mw
Dimensions		Board:156 (W) × 20 (H) × 225 (D) (mm) Chassis:440 (W) × 44 (H) × 230 (D) (mm)
Environmental Requirements	Operating Temperature	-10℃ ~ 50℃
	Storage Temperature	-40℃ ~ 80℃
	Relative Humidity	5% ~ 95% non-condensing
Safety and EMC		Compliant with FCC, UL, CE, TUV, CSA standards

Order Information

Part No.	Specifications
FW6CM8-3145	CWDM MUX DEMUX 8CH (1310~1450nm)With EXP Port, LC/UPC Dual fiber, used in FW6600 series take one slot
FW6CM8-4761	CWDM MUX DEMUX 8CH (1470~1610nm)With EXP Port, LC/UPC Dual fiber, used in FW6600 series take one slot
FW6CM18-2761	CWDM MUX DEMUX 18CH (1470~1610nm), LC/UPC Dual fiber, used in FW6600 series take two slot
FW6DM8-C2128	DWDM MUX DEMUX 8CH (C21~C28) With EXP Port, LC/UPC Dual fiber, used in FW6600 series take one slot
FW6DM8-C2936	DWDM MUX DEMUX 8CH (C29~C36) With EXP Port,

	LC/UPC Dual fiber, used in FW6600 series take one slot
FW6DM8-C3744	DWDM MUX DEMUX 8CH (C37~C44) With EXP Port, LC/UPC Dual fiber, used in FW6600 series take one slot
FW6DM8-C4552	DWDM MUX DEMUX 8CH (C45~C52) With EXP Port, LC/UPC Dual fiber, used in FW6600 series take one slot
FW6DM8-C5360	DWDM MUX DEMUX 8CH (C53~C60) With EXP Port, LC/UPC Dual fiber, used in FW6600 series take one slot
FW6DM16-C2136	DWDM MUX DEMUX 16CH (C21-C36) With EXP Port, LC/UPC Dual fiber, used in FW6600 series take two slot
FW6DM16-C4560	DWDM MUX DEMUX 16CH (C45-C60) With EXP Port, LC/UPC Dual fiber, used in FW6600 series take two slot
FW6DM40-C2160	DWDM MUX 40CH (C21-C60) With EXP Port, LC/UPC Single fiber, used in FW6600 series take two slot
FW6DD40-C2160	DWDM DEMUX 40CH (C21-C60) With EXP Port, LC/UPC Single fiber, used in FW6600 series take two slot
Others	We Support Customized Design, please contact us by email.