

# 8ch C21-C35 Single Fiber DWDM Mux Demux + Expansion Port, Side-A

FMU Plug-in Module, LC/UPC Data Center & Cloud Computing Infrastructure Solutions



#### **Overview**

These compact DWDM Mux Demux work in a pair to provide 8 bidirectional channels on a single strand of fiber. They use the 8 DWDM ITU grids being used in each direction.

Our DWDM Mux Demux are modular, scalable and are perfectly suited to transport PDH, SDH / SONET, ETHERNET services over WWDM, CWDM and DWDM in optical metro edge and access networks.



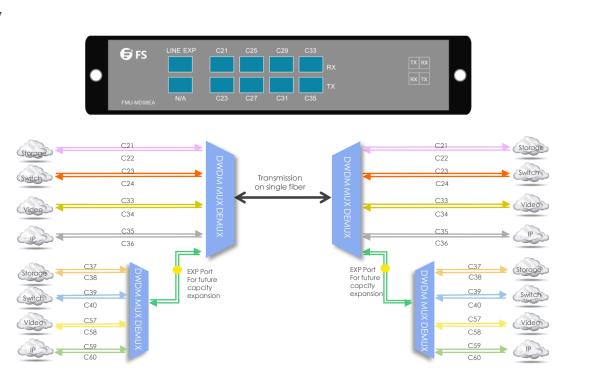
# **Highlights**

- 8 bi-directional channels using standard 16 channels DWDM ITU grid C21 C35
- Low insertion loss
- Low-profile modular design, fits in FMU 2-slot 1U chassis
- LC/UPC duplex connectors
- Expansion port for future capacity expansion
- Compliant to ITU G.694.1, 100GHz ITU gird, 0.8 nm spacing
- · High quality thin film filter technology
- Passive, no electricity needed (MTBF ca. 500 years)

# **General Specification**

Front View Function

#### 50117



#### Notes:

1. Single fiber bi-directional transmission should be used in pairs, Mux/Demux port for specific wavelength must be opposite.



## **Technical Data**

Parameter	Value
ITU Channel (Tx/Rx)	C22/C21,C24/C23,C26/C25,C28/C27, C30/C29,C32/C31,C34/C33,C36/C35
Operating Wavelength	1549.32-1560.61nm
Channel Spacing	100GHz (0.8nm)
Channel Passband	±0.11nm
Center Wavelength Accuracy	±0.05nm
Insertion Loss	≤ 4.6dB
Insertion Loss (Exp port)	≤ 4.6dB
Adjacent Channel Isolation	≥ 30dB
Non-adjacent Channel Isolation	≥ 40dB
Filter Technology	TFF (Thin Film Filter)
Passband Ripple	≤0.5dB
Return Loss	≥ 45dB
Directivity	≥ 45dB
Polarzation Dependent Loss	≤ 0.3dB
Polarization Mode Dispersion	≤ 0.1 ps
Power Handling	≤ 500mW
Operating Temperature	-40° C∼ +85° C
Storage Temperature	-40° C~ +85° C

#### Notes:

<sup>1.</sup> Specified with connectors and adapters.



# High Quality DWDM Transceivers to Build a Passive DWDM System

FS.COM offers DWDM transceiver modules in SFP, SFP+, XFP, Xenpak and X2 formats. Every optics is tested in real switches and full compatible with Cisco, Juniper, Arista, Brocade, Dell, Extreme, etc.

Transmission distances range from 20-120km for Gigabit speeds, and 40-120km for 10 Gigabit speeds, without the use of optical amplifiers.



### **DWDM Mux Demux Series**

Application	ID#	Description
	40	7/16/8 CHANNELS DUAL FIBER
40 channels	<u>#33485</u>	40ch. DWDM Mux Demux, 100GHz, C21-C60, with monitor port, 3.0dB typical IL, 4.5dB max IL, duplex LC/UPC
40 channels	<u>#35887</u>	40ch. DWDM Mux Demux, 100GHz, C21-C60, with monitor port and 1310nm port, 3.5dB typical IL, 5.0dB max IL, duplex LC/UPC
40 channels	#79580	Flat-top 40ch. DWDM Mux Demux, 100GHz, C21-C60, duplex LC/UPC
16 channels	#72430	16ch. DWDM Mux Demux, 100GHz, C21-C36, with monitor port, expansion port and 1310nm port, IL $\leq$ 5.2dB, duplex LC/UPC
16 channels	#26569	16ch. DWDM Mux Demux, 100GHz, C27-C42, IL ≤ 4.6dB, duplex LC/UPC
16 channels	#57884	16ch. DWDM Mux Demux, 100GHz, C43-C58, with expansion port, IL $\leq$ 4.6dB, duplex LC/UPC
8 channels	#30568	8ch. DWDM Mux Demux, 100GHz, C53-C60, with expansion port, IL $\leq$ 3.2dB, duplex LC/UPC
8 channels	<u>#72433</u>	8ch. DWDM Mux Demux, 100GHz, C53-C60, with Monitor Port, Expansion Port and 1310nm Port, IL $\leq$ 3.7dB, duplex LC/UPC



#### **16/8 CHANNELS SINGLE FIBER**

16 channels	<u>#78535</u>	16ch. DWDM Mux Demux, 100GHz, C21-C36 for transceiver wavelengths, IL $\leq$ 4.3dB, LC/UPC
16 channels	<u>#78536</u>	16ch. DWDM Mux Demux, 100GHz, C45-C60 for transceiver wavelengths, IL $\leq$ 4.3dB, LC/UPC
8 channels	<u>#50116</u>	8ch. DWDM Mux Demux, 100GHz, C22-C36 for transceiver wavelengths, with expansion port, IL $\leq$ 4.6dB, LC/UPC
8 channels	<u>#50117</u>	8ch. DWDM Mux Demux, 100GHz, C21-C35 for transceiver wavelengths, with expansion port, IL $\leq$ 4.6dB, LC/UPC

<sup>\*</sup>Standard products are listed above. Customized specifications are available upon request.

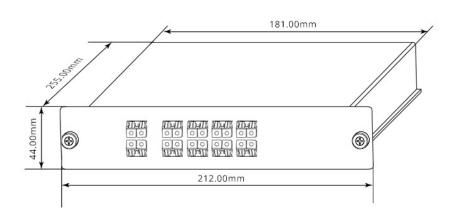
# **ITU Channel Guiding**

ITU Channel (xx or yy)	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Wavelength (nm)	1560.61	1559.79	1558.98	1558.17	1557.36	1556.55	1555.75	1554.94	1554.13	1553.33	1552.52	1551.72	1550.92	1550.12	1549.32	1548.51	1547.72	1546.92	1546.12	1545.32

ITU Channel (xx or yy)	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Wavelength (nm)	1544.53	1543.73	1542.94	1542.14	1541.35	1540.56	1539.77	1538.98	1538.19	1537.40	1536.61	1535.82	1535.04	1534.25	1533.47	1532.68	1531.90	1531.12	1530.33	1529.55

# **Layout and Dimensions**

- Width: 212.00mm (8.35")
- Height: 44.00mm (1.73")
- Depth: 255.00mm (10.04")
- The color of the module is black
- All fonts and lables are printed in black











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