

40ch C21-C60 DWDM Mux Demux + Monitor Port, 3.0dB Typical IL

1U Rack Mount, LC/UPC Data Center & Cloud Computing Infrastructure Solutions



Overview

The 40ch Mux Demux is a high density, low loss and standalone passive optical module that provides excellent solution for infrastructure savings by aggregating all 40 DWDM channels at a single site. All 40 channels are spread over the C-band per ITU-T 100GHz spacing between channels using high quality AAWG technology.

It is packaged with a 1U 19" rack mount chassis for simple installation and modularity. This chassis based system offers network equipment manufacturers a more scalable and higher-density solution to add DWDM capability to their existing and new networks with simple pluggable interface.



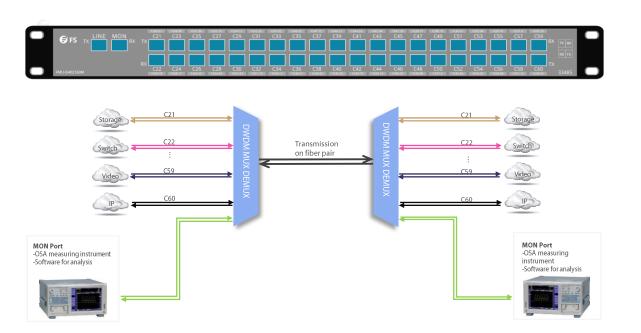
Highlights

- Multiplexing of 40 channels on fiber pair
- Low insertion loss
- 1U 19" low profile modular design
- LC/UPC duplex connectors
- 1% monitor port for Tx and Rx, ensures easy troubleshooting without downtime
- Compliant to ITU G.694.1, 100GHz ITU gird, 0.8 nm spacing
- Based on a-athermal AWG technology with Gaussian shaped pass bands
- Qualified to Telcordia GR-1209-CORE and GR-1221-CORE
- Passive, no electricity needed (MTBF ca. 500 years)

General Specification

Front View Function

33485





Technical Data

Parameter	Value
ITU Channel	40 channels C21-C60 (DWDM ports)
Operating Wavelength	1520-1570nm
Channel Spacing	100GHz (0.8nm)
Channel Passband	±0.11nm
Center Wavelength Accuracy	±0.05nm
-1dB Channel Bandwidth	≥ 0.24nm
-3dB Channel Bandwidth	≥ 0.43nm
Insertion Loss	≤ 4.5dB, 3.0dB typical
Insertion Loss (1% Mon)	≤ 26dB
Adjacent Channel Isolation	≥ 25dB
Non-adjacent Channel Isolation	≥ 29dB
Filter Technology	AAWG (Gaussian)
Insertion Loss Uniformity	≤ 1.5dB
Return Loss	≥ 40dB
Directivity	≥ 40dB
Polarzation Dependent Loss	≤ 0.3dB
Polarization Mode Dispersion	≤ 0.1 ps
Power Handling	≤ 300mW
Operating Temperature	-5° C~ +65° C
Storage Temperature	-40° C∼ +85° C

Notes:

^{1.} Specified with connectors and adapters.



High Quality DWDM Transceivers to Build a Passive DWDM System

FS.COM offers DWDM transceiver modules in SFP, SFP+ and XFP 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.	/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	#35887	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	#7958 <u>0</u>	Flat-top 40ch. DWDM Mux Demux, 100GHz, C21-C60, duplex LC/UPC
16 channels	<u>#72430</u>	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	<u>#57884</u>	16ch. DWDM Mux Demux, 100GHz, C43-C58, with expansion port, IL \leq 4.6dB, duplex LC/UPC
8 channels	<u>#30568</u>	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	#78 <u>536</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

^{*}Standard products are listed above. Customized specifications are available upon request.

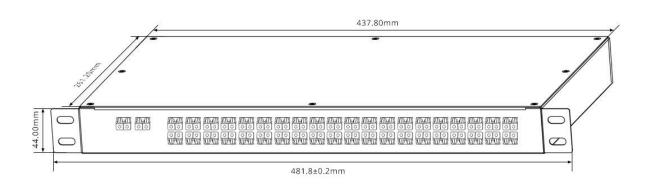
ITU Channel Guiding

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: 481.8 ± 0.2mm (19")
- Height: 44mm (1.73")
- Depth: 261.2mm (10.28")
- The color of the module is black
- All fonts and lables are printed in black











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