

# 16ch C21-C36 DWDM Mux Demux + Monitor, 1310nm and Expansion Port

1U Rack Mount, LC/UPC

Data Center & Cloud Computing Infrastructure Solutions



## Overview

The DWDM passive Mux Demux modules deliver the benefits of a Dense Wave Division Multiplexer in a fully passive solution. They are designed for long-haul transmission where wavelengths are packed tightly together over the C-band range of wavelengths, up to 48 wavelengths in 100GHz grid(0.8nm) and 96 wavelengths in 50GHz grid(0.4nm). ITU G.694.1 standard and Telcordia GR1221, GR1209, CE, RoHS, FCC are compliant.

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.

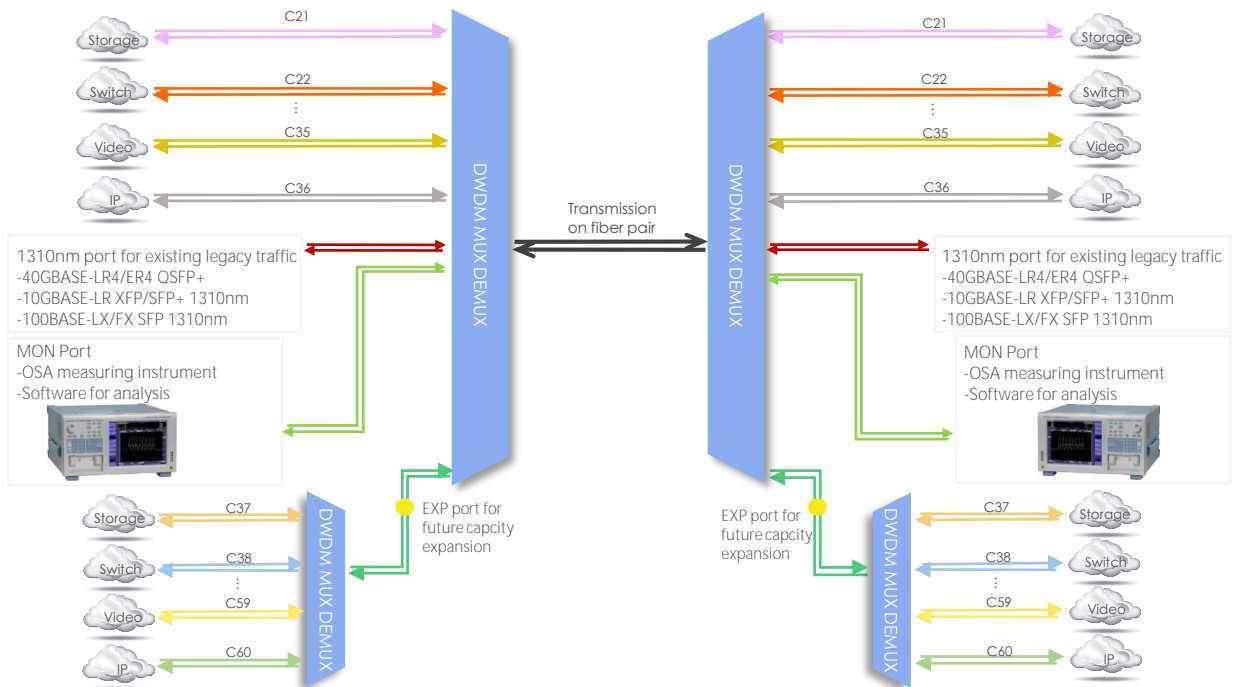
## Highlights

- Multiplexing of 16 channels on fiber pair
- Low insertion loss
- 1U 19" low profile modular design
- LC/UPC connectors
- 1% monitor port for Tx and Rx, ensures easy troubleshooting without downtime
- 1310nm port allows the overlaid on an existing legacy 1310nm network such as 1000Base SFP LX, 10G SFP+ LR, 40G QSFP+ LR4 and 100G CFP LR4
- Expansion port for future capacity expansion
- Compliant to ITU G.694.1, 100GHz ITU grid, 0.8 nm spacing
- High quality thin film filter technology
- Passive, no electricity needed (MTBF ca. 500 years)

## General Specification



72430



## Technical Data

Parameter	Value
ITU Channel	16 channels C21-C36 (DWDM ports)
Operating Wavelength	1548.51-1560.61nm
Channel Spacing	100GHz (0.8nm)
Channel Passband	±0.11nm
Insertion Loss	≤ 5.2dB
Insertion Loss (+1% Mon)	≤ 26dB
Insertion Loss (1310 port)	≤ 1.0dB
Insertion Loss (Exp port)	≤ 5.0dB
Adjacent Channel Isolation	≥ 30dB
Non-adjacent Channel Isolation	≥ 40dB
Exp Isolation	≥ 13dB
Filter Technology	TFF (Thin Film Filter)
Return Loss	≥ 45dB
Directivity	≥ 50dB
Pass-band Ripple	≤0.5dB
Polarization Dependent Loss	≤ 0.2dB
Polarization Mode Dispersion	≤ 0.1ps
Power Handling	≤ 500mW
Operating Temperature	-40° C~ +85° 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-SFP10G-80



DWDM-XFP10G-80



DWDM-Tunable-XFP



DWDM-Tunable-SFP+



DWDM-SFP1G-ZX

## DWDM Mux Demux Series

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

### 16/8 CHANNELS SINGLE FIBER

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

\*Standard products are listed above. Customized specifications are available upon request.

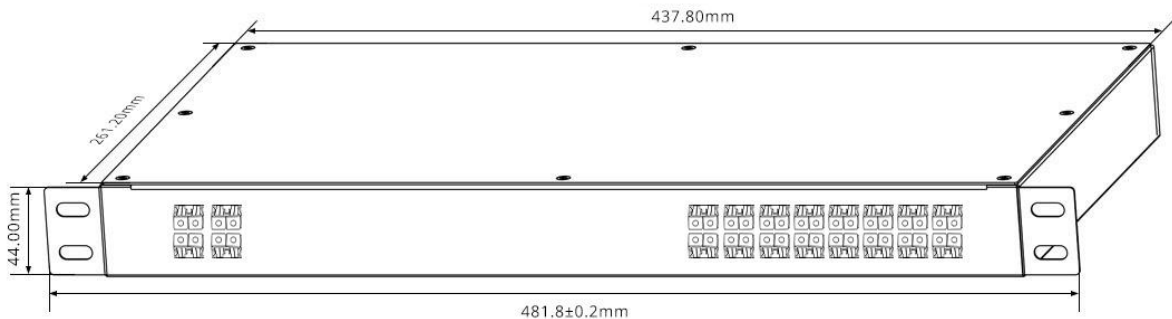
### ITU Channel Guiding

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





 <https://www.fs.com>



All statements, technical information, and recommendations related to the products here are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. Please contact FS for more information.