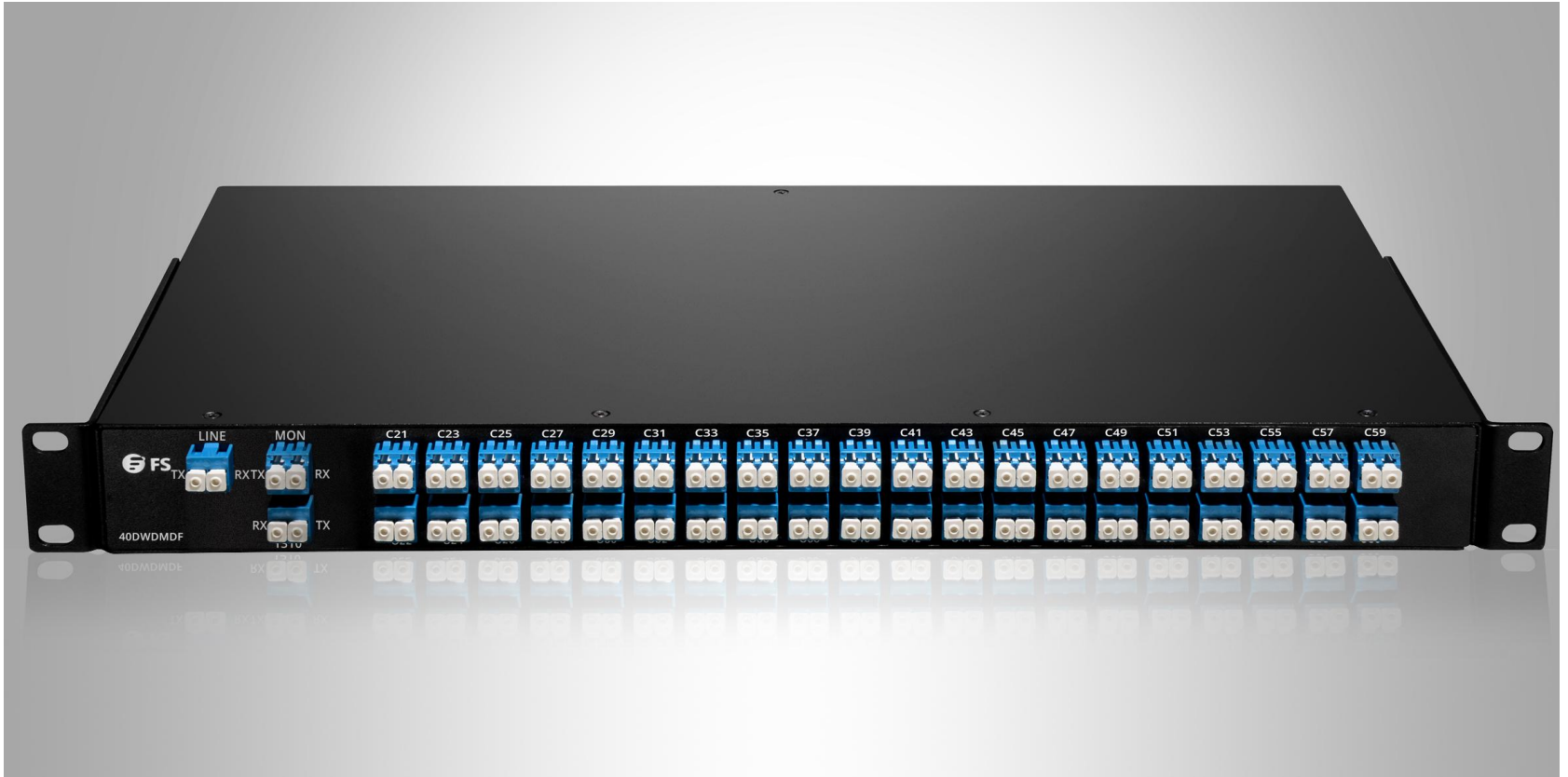


## Datasheet

### 40ch DWDM Mux Demux + Monitor Port + 1310nm Port for 40G/100G

1U Rack Mount, LC/UPC



## 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 spreading over the C-band per ITU-T 100GHz spacing between channels using high quality AAWG technology.

The 1310nm port can be used for 40G/100G transceivers (40GBASE-LR4/ER4 resp. 100GBASE-LR4/ER4). The 40 DWDM channels are able to transport 400Gbps so that one can run totally 500Gbps over this unit.

## Highlights

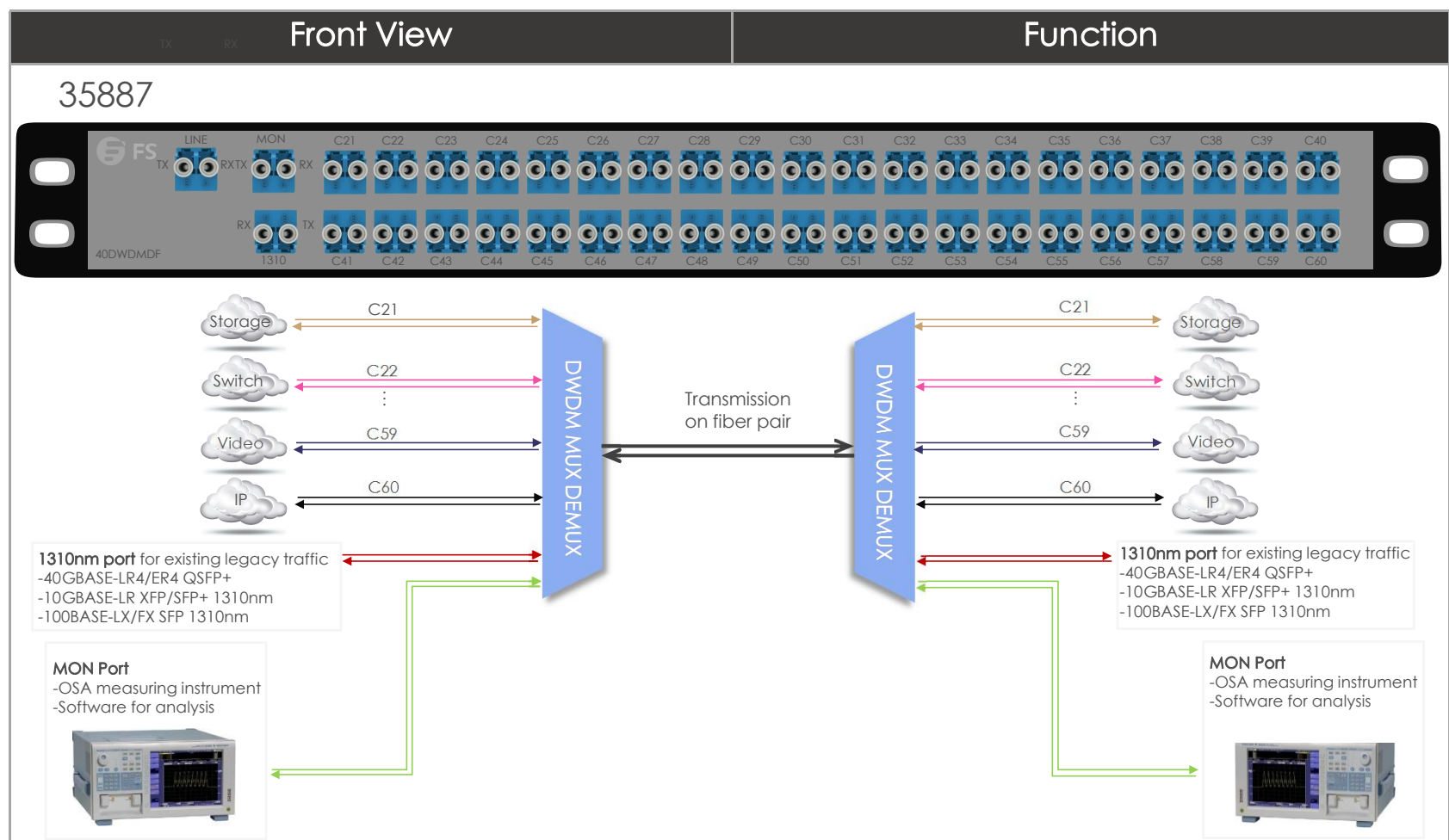
- Multiplexing of 40 channels on fiber pair
- Low insertion loss
- 1U 19" low profile modular design
- LC/UPC duplex connectors
- 1% monitor port for Tx and Rx, ensures easy troubleshooting without downtime
- 1310nm port allows the overlaid on an existing legacy 1310nm network such as 1000Base SFP LX, 10G SFP+ LR, 40G QSFP+ LR4 and 100G CFP LR4
- Compliant to ITU G.694.1, 100GHz ITU grid, 0.8 nm spacing
- Based on a- athermal AWG technology with Gaussian shaped pass bands
- Passive, no electricity needed (MTBF ca. 500 years)

## Datasheet

### Technical Data

Operating Channel	40 channels C21-C60 (DWDM ports)
Channel Spacing	100 GHz (0.8nm)
Channel Passband	±0.11nm
IL Link	< 5.0dB, 3.5dB typical (including connectors and adapters)
IL Link@Mon/1310	0.5dB
Filter Technology	AAWG(Athermal Arrayed Waveguide Grating)
Adjacent Channel Isolation	> 25dB
Non-adjacent Channel Isolation	> 29dB
Operating Return Loss	> 45dB
Directivity	> 50dB
Polarzation Dependent Loss	< 0.15dB
Channel Uniformity	< 1.5dB
Max. Optical Power	< 500mW
Operating Temperature	-5° C~ +75° C
Storage Temperature	-40° C~ +80° C

### General Specification



## Datasheet

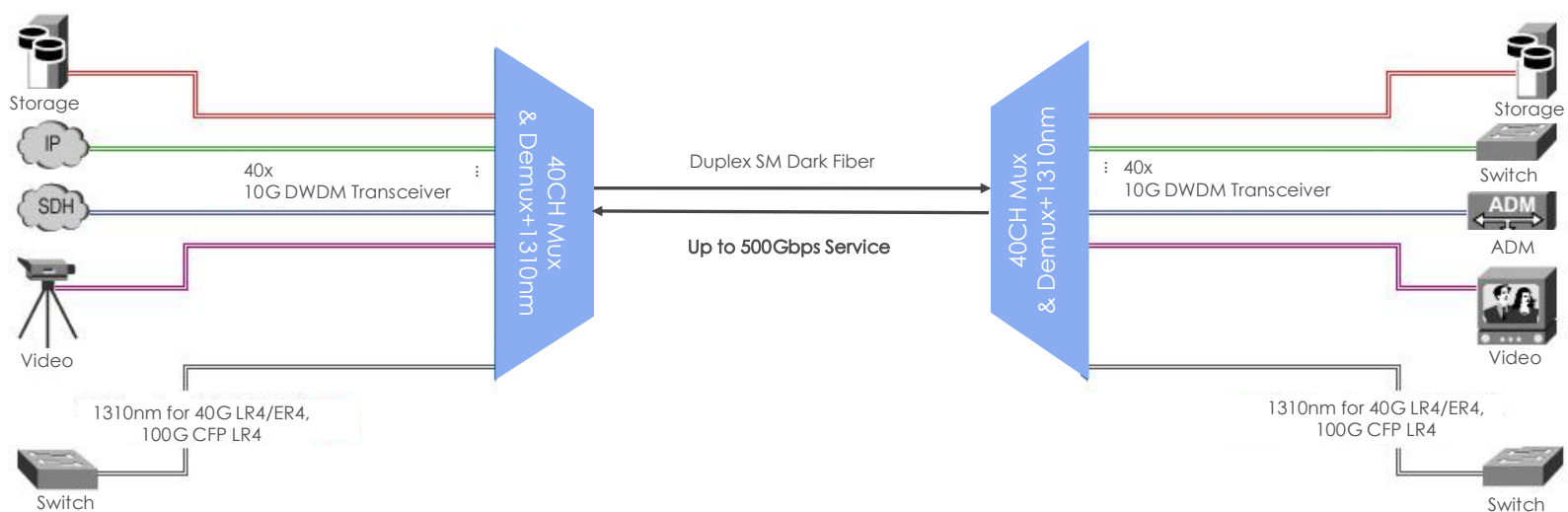
### Application Example

#### Overlaying 10Gbps Networks with Additional 40Gbps or 100Gbps Services

How to add 40Gbps and 100Gbps services to your existing metro networks without effecting the legacy installation?

In fact, you just need to plug 40G or 100G fiber optic transceiver into the terminal equipment (Ethernet switch, router etc.) , then use the patch cable to connect it to your existing DWDM network via a 1310nm band pass port on the DWDM multiplexer.

Since the 1310nm band port is integrated into a 40 channels 100GHz DWDM multiplexer, then this set-up allows the transport of up to 40 x10Gbps plus 100Gbps over one fiber pair, in total 500Gbps, but without replacing any infrastructure.



### DWDM Mux Demux Series

#### 40/16 CHANNELS

Application	ID#	Description
40 channels	33485	40 ch. DWDM Mux Demux, 100GHz, C21-C60, with monitor port, 3.0dB typical IL, 4.5dB max IL, duplex LC/UPC
40 channels	35887	40 ch. DWDM Mux Demux, 100GHz, C21-C60, with monitor port and 1310nm port, 3.5dB typical IL, 5.0dB max IL, duplex LC/UPC
16 channels	50123	16 ch. DWDM Mux Demux, 100GHz, C21-C36, with expansion port, IL <4.95dB, duplex LC/UPC

# Datasheet

## 8 CHANNELS SINGLE FIBER

Application	ID#	Description
8 channels	68216	Pair Packaged 8 ch. DWDM Mux Demux, 100GHz, C21-C36 for transceiver wavelengths, with expansion port, IL <4.95dB/unit, LC/UPC
8 channels	68219	Pair Packaged 8 ch. DWDM Mux Demux, 100GHz, C43-C58 for transceiver wavelengths, IL <4.95dB/unit, LC/UPC

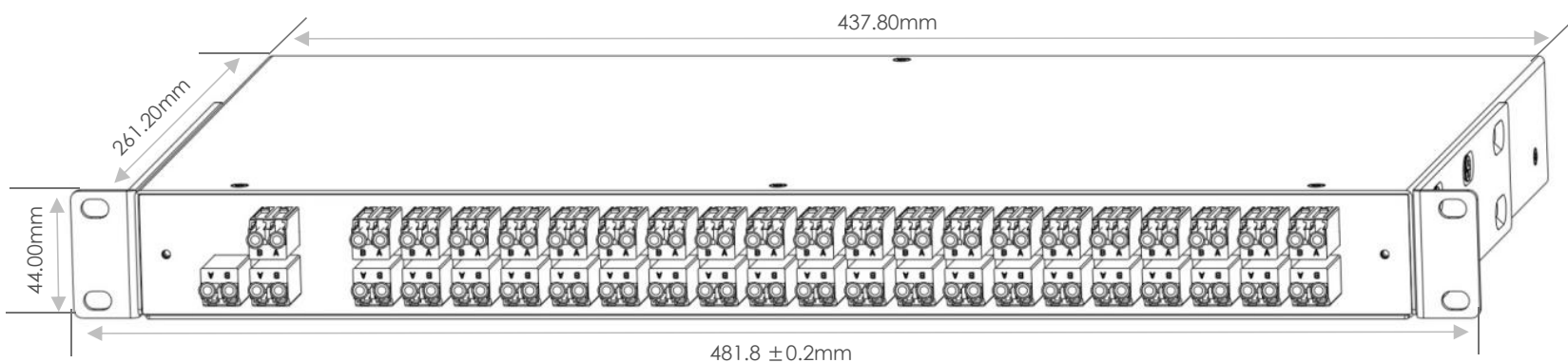
## ITU Channel Guiding

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 labels are printed in black



## Datasheet

### Contact Us

Fiberstore China  
Room 301, Third Floor, Weiyong  
Building, No. 10 Kefa Road, Nanshan  
District, Shenzhen, 518057, China  
Tel: +86 (755) 8300 3611  
Fax: +86 (755) 8326 9395

Fiberstore U.S.  
18625 72nd Avenue S  
Kent, WA, 98032  
United States  
Tel: +1-425-226-2035  
Fax: +1-253-246-7881

Fiberstore Hong Kong  
1220 Tung Chun Commercial Centre,  
438-444 Shanghai Street, Kowloon,  
HongKong  
Tel: +(852) 817 636 06  
Fax: +(852) 817 636 06

Fiberstore U.K.  
Third Floor 207 Regent Street,  
London, W1B 3HH,  
United Kingdom  
Tel: +44 (020) 3287 6810

Addresses, phone number and fax number also have been listed at [www.fs.com](http://www.fs.com). Please e-mail us at [sales@fs.com](mailto:sales@fs.com) or call us for assistance.

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