

# F-DMUX-40+1-2160

40 channel DWDM mux+demux with monitor ports and combined 1310 wideband / OSC port



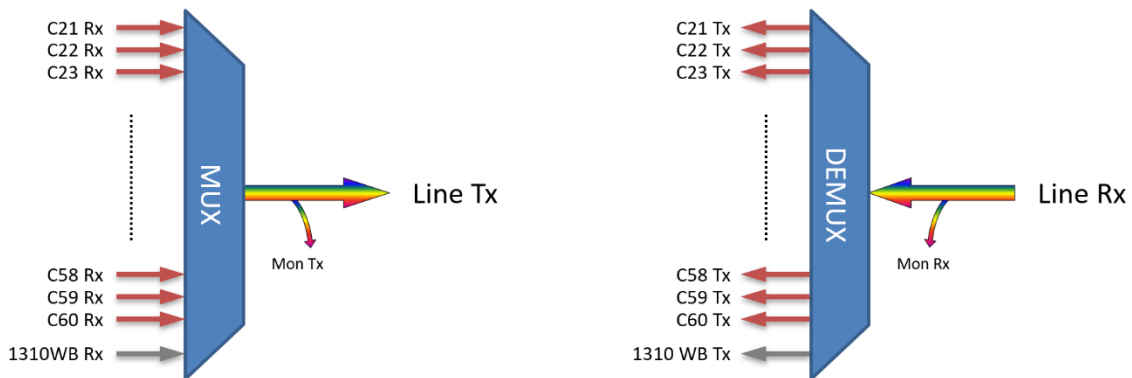
## DESCRIPTION

This DWDM multiplexer/demultiplexer covers 40 DWDM channels in the C-band. Monitor ports ensures easy troubleshooting without downtime. The upgrade/OSC port can be used for legacy 1310 nm systems, 40/100GBASE-ER4 interfaces, a low-band CWDM multiplexer or an OSC (Optical Supervisory Channel) on 1510 nm. The filter is mounted in a 19" rack module which can be retracted for enhanced protection of fiber connections and with a fiber organizer shelf.

## FEATURES

- Dense WDM in compliance with ITU-T G.694.1
- 40-channel DWDM mux/demux, 100 GHz spacing
- 1% monitoring ports for Tx and Rx
- 1310 wideband / upgrade port for 16 additional DWDM channels, 40/100GBASE-ER4, low band CWDM or 1310 nm legacy systems
- Based on Arrayed Waveguide Grating (AWG) with epoxy free optical path
- Protocol transparent (support 1G, 10G etc.)
- 19" rack module with adjustable brackets and removable fiber organizing shelf
- LC connectors

## FUNCTIONAL DESCRIPTION



Ch. 21 = 192.1 THz = 1560.61 nm  
 Ch. 22 = 192.2 THz = 1559.79 nm  
 ⋮  
 Ch. 60 = 196.0 THz = 1529.55 nm

**TECHNICAL DATA**

Parameters	Units			
		Min	Typ	Max
Number of Channels			40	
Channel Spacing	GHz		100	
ITU Channels		21		60
Channel Center Wavelength	nm	1529.55		1560.61
Channel Center Frequency	THz	192.1		196.0
Clear Channel Passband	nm		±0.1	
Wavelength Stability	nm		±0.05	
-1 dB /-1 dB Channel Bandwidth	nm	0.24		
-3 dB /-3 dB Channel Bandwidth	nm	0.43		
Channel Optical Insertion Loss at ITU grid	dB		4.0	5.5
Insertion loss 1310 nm wideband port	dB		0.9	1.5
1310 wideband port passband	nm	1260		1520
Monitoring Ports Insertion Loss	dB		20	
Adjacent Channel Isolation	dB	25		
Non-Adjacent, Channel Isolation	dB	29		
Total Channel Isolation	dB	22		
Insertion Loss Uniformity	dB		0.8	1.5
Insertion Loss Ripple	dB			1.5
Optical Return loss	dB	40		
PDL in Clear Channel Band	dB		0.3	0.5
Polarization Mode Dispersion	ps			0.5
Maximum Optical Power	dBm			23
Operating temperature	°C	0		65
Storage temperature	°C	-40		85

**ORDERING INFORMATION**

Product number	Description
F-DMUX-40+1-2160-MLU	Fiberworks 40+1 ch DWDM Mux+Demux 19" 1RU ITU ch. 21-40, 100 GHz, 1310WB, Monitor, LC/UPC