

DWDM-MUX

MUX/DEMUX, 19" chassis, 8/ 18CH

General Description

Multiplexer products combine multiple data signals into one signal for transport over one fiber. De-multiplexers separate the signal at the other end. Wavelength division multiplexing (WDM) greatly increases capacity of systems. To manage bandwidth and expand capacity of existing fiber optic backbones, Wavelength Division Multiplexing (WDM) works by simultaneously combining and transmitting multiple signals at different wavelengths through the same fiber.

A key advantage of WDM is its protocol and bit-rate independency. WDM-based networks can transmit data in IP, ATM, SONET/SDH, and Ethernet. It can handle bitrates between 100 Mbps and 40 Gbps. Therefore, WDM-based networks can carry different types of traffic at different speeds. It creates a less costly method for quick response to customers' bandwidth demands and protocol changes.

The MUX/DEMUX is deployed in dense wavelength division multiplexing (DWDM). The device is passive when it comes to electricity and measures as 1RU 19" device. The device comes with LC connectors. MUX devices are available from 8 to 96 channels.

The 8 channel and 16 version also comes with an upgrade port. The upgrade port is an addition of wavelength 150-1620. This allows you to add another channels in a later stadium without having the need to replace anything.

Custom versions are available upon request.

Product features

- Available in 8 to 96ch in 50Ghz and 100Ghz
- Low attenuation
- Comes with LC/UPC connectors (other connectors on request)
- Passive; no electricity needed
- Comes standard with Monitor port (1% tap) on 8 and 16
- Clear Tx and Rx prints for easy patching
- 8 and 16 port MUX comes with UPG port (1260-1458nm)

Product Characteristics

Parameter	Unit		8CH DWDM	16CH DWDM	40ch	48ch	96ch
Channel Spacing	nm		0,8	0,8	0,8	0,8	0,4
Operation Wavelength Range	Thz		Ch28-35 default all combination available	Ch20-35 default all combination available	Ch20-59 default all combination available	Ch17-64 default all combination available	Ch17.5-65 default all combination available
Channel Center Wavelength (CWL)	nm		ITU±0.11	ITU±0.11	0,05 average 0,1nm max	0,05 average 0,1nm max	0,025 average 0,05nm max
UPG Center Wavelength	nm		1500~1600	1500~1600	optional	optional	optional
Channel Insertion Loss(with connector)	Max.	dB	2.5	3,5	3,5	3,5	4,5
	AVG	dB	2.0	2.7	4	4	3,8
Extra Insertion Loss Monitor port	1%		0.3	0.3	optional	optional	optional
	5%		0.3	0.3	optional	optional	optional
Adjacent Channel Isolation	Min	dB	30	30	27	27	27
Non-adjacent Channel Isolation	Min	dB	45	45	30	30	30
UPG port Isolation	Min	dB	13	13	optional	optional	optional
Return Loss @CWL	Min	dB	45	45	45	45	45
Polarization Dependent Loss	Max.	dB	0.2	0.2	0,5	0,5	0,5
Power Handing	Max.	mW	500	500	500	500	500
Operating Temperature	°C		-40~+85	-40~+85	default -20~+70 optionally -40~+85	default -20~+70 optionally -40~+85	default -20~+70 optionally -40~+85
Storage Temperature	°C		-60~+90	-60~+90	-40~+85	-40~+85	-40~+85
Connector Type	---		LC/UPC standard other on request	LC/UPC standard other on request	LC/UPC standard other on request	LC/UPC standard other on request	LC/UPC standard other on request
Box Dimension (L X W X H)	mm		1RU 19" casing	1RU 19" casing	1RU 19" casing	1RU 19" casing	2RU 19" casing