

### **10G EDFAMUX**

Active MUX with built-in EDFAs and Fixed Dispersion Compensator, Up to 140km and 200km Reach, C-Band 100Ghz and 1% Monitor port, 1RU 19" casing

### **Features**

- Supports 8, 10 or 16 communication lines of 10G from 140km up to 200km
- 8 Channel, 10 Channel and 16 Channel options
- Mix of 1/10G optics and/or Fiber Channel possible
- Web and Console configuration
- Web, SNMP and Syslog monitoring
- Monitor Port
- Auto Gain Control
- Default 2 x AC (100-240V), DC optional
- 19" 1U Rack Mount Form Factor
- Operating Temperature: -5 ~ 60°C
- UPC/LC Adapters with auto dust shutters



### **Product Description**

This 10G EDFAMUX is a Passive Multiplexer with Active Components, which combines three devices into one rack unit. Typically, long distance projects require a 1RU standalone Passive MUX, a separate EDFA (amplifier), and a separate Dispersion Compensation unit. This EDFAMUX combines all of these features in a 1RU 19"casing, which requires less space and less patching. All of our mux/demux products are 100% compliant and provide a cost effective solution for your network upgrade needs. With our certification test program, we guarantee your product will work correctly the first time.

### **Order Information**

Part Numbers	Descriptions
C-EDFAMUX-10X10G-28-200	10Ch Active MUX with built-in EDFAs and 120km fixed Dispersion Compensator, 10x10G to
	reach max of 200km, Channels 28-37 C-Band 100Ghz and 1% Monitor port, 1RU 19" casing
C-EDFAMUX-10X10G-28-140	10Ch Active MUX with built-in EDFAs and 60km fixed Dispersion Compensator, 10x10G to
	reach max of 140km, Channels 28-37 C-Band 100Ghz and 1% Monitor port, 1RU 19" casing
C-EDFAMUX-16X10G-20-140	16Ch Active MUX with built-in EDFAs and 60km fixed Dispersion Compensator, 16x10G to
	reach max of 140km, Channels 20-35 C-Band 100Ghz and 1% Monitor port, 1RU 19" casing
C-EDFAMUX8X10G-20-27/43-	8Ch 8x10G 120KM EDFAMUX, EDFA, Red/Blue Filter, Simplex, Mux Channels 20-27, Demux
50-S	43-50
C-EDFAMUX8X10G-50-43/27-	8Ch 8x10G 120KM EDFAMUX, EDFA, Red/Blue Filter, Simplex, Mux Channels 43-50, Demux
20-S	20-27

# **Mux Specifications**

Parameter	10G - 140km	10G - 200km	Units
Channel Spacing	0.8	0.8	nm
Operation Wavelength Range	10CH: Default Ch 28-37 16CH: Default Ch 20-35	Default Ch 28-37	ITU 100GHz
Channel Center Wavelength (CWL)	ITU±0.11	ITU±0.11	nm
Max Channel Insertion Loss	2.5	2.5	dB
Isolation – Adjacent Channel	30	30	dB
Isolation – Non-Adjacent Channel	45	45	dB
Return Loss @ CWL	45	45	dB
Monitor Port	1%	1%	%

## **EDFA Booster Specifications**

Parameter	10G - 140km	10G - 200km	Units
EDFA Operating Mode	N/A	AGC	
Input Power Range	N/A	-15 - +8	dBm
Typical Noise Figure	N/A	4.5	dB
Typical Pump Power	N/A	Adjustable 14-20	dB
Saturation	N/A	20	dBm

**EDFA Post-Amp. Specifications** 

Parameter	10G - 140km	10G - 200km	Units
EDFA Operating Mode	AGC	AGC	
Input Power Range	-30 to -5	-30 to -5	dBm
Typical Noise Figure	<4.5	<4.5	dB
Typical Pump Power	21	21	dB
Saturation	20	20	dBm

# **Dispersion Compensator Specifications**

Parameter	10G - 140km 10G - 200km		Units	
DCM Type	Fiber Bragg Grating	Fiber Bragg Grating		
Dispersion Compensating	-1000	-2000	Ps/nm	
Insertion Loss	<3	<3	dB	

**Casing Specifications** 

Parameter	10G - 140km	10G - 200km	Units	
Input Power	100-240	100-240	AC/V	
	36-72	36-72	DC/V	
Dimensions	482.6*300*44mm	482.6*300*44mm	mm	
Operating Temperature	-5 ~ 60	-5 ~ 60	°C	
Power Consumption	<8	<12	W	
Airflow	Side-to-Side	Side-to-Side		

### **10G EDFAMUX**

Part Numbers	10G DWDM	MON	EXT
C-EDFAMUX-10X10G-28-200	CH 28-37	1%	n/a
C-EDFAMUX-10X10G-28-140	CH 28-37	1%	n/a
C-EDFAMUX-16X10G-20-140	CH 20-35	1%	n/a
C-EDFAMUX8X10G-20-27/43-50-S	Mux CH 20-27, Demux CH 43-50	1%	n/a
C-EDFAMUX8X10G-50-43/27-20-S	Mux CH 43-50, Demux CH 20-27	1%	n/a

## **DWDM Wavelengths**

### **ITU 100GHz Channels**

ITU Channel Number	Wavelength, nm	Frequency, THz	ITU Channel Number	Wavelength, nm	Frequency, THz
20	1561.42	192.0	40	1545.32	194.0
21	1560.61	192.1	41	1544.53	194.1
22	1559.79	192.2	42	1543.73	194.2
23	1558.98	192.3	43	1542.94	194.3
24	1558.17	192.4	44	1542.14	194.4
25	1557.36	192.5	45	1541.35	194.4
26	1556.55	192.6	46	1540.56	194.6
27	1555.75	192.7	47	1539.77	194.7
28	1554.94	192.8	48	1538.98	194.8
29	1554.13	192.9	49	1538.19	194.9
30	1553.33	193.0	50	1537.40	195.0
31	1552.52	193.1	51	1536.61	195.1
32	1551.72	193.2	52	1535.82	195.2
33	1550.92	193.3	53	1535.04	195.3
34	1550.12	193.4	54	1534.25	195.4
35	1549.32	193.5	55	1533.47	195.5

36	1548.51	193.6	56	1532.68	195.6
37	1547.72	193.7	57	1531.90	195.7
38	1546.92	193.8	58	1531.12	195.8
39	1546.12	193.9	59	1530.33	195.9

### **About ProLabs**

Our experience comes as standard; for over 15 years ProLabs has delivered optical connectivity solutions that give our customers freedom and choice through our ability to provide seamless interoperability. At the heart of our company is the ability to provide state-of-the-art optical transport and connectivity solutions that are compatible with over 90 optical switching and transport platforms.

### **Complete Portfolio of Network Solutions**

ProLabs is focused on innovations in optical transport and connectivity. The combination of our knowledge of optics and networking equipment enables ProLabs to be your single source for optical transport and connectivity solutions from 100Mb to 400G while providing innovative solutions that increase network efficiency. We provide the optical connectivity expertise that is compatible with and enhances your switching and transport equipment.

#### **Trusted Partner**

Customer service is our number one value. ProLabs has invested in people, labs and manufacturing capacity to ensure that you get immediate answers to your questions and compatible product when needed. With Engineering and Manufacturing offices in the U.K. and U.S. augmented by field offices throughout the U.S., U.K. and Asia, ProLabs is able to be our customers best advocate 24 hours a day.

### **Contact Information**

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