



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

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.

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



For your product safety, please read the following information carefully before any manipulation of the transceiver:



ESD

This transceiver is specified as ESD threshold 1kV for SFI pins and 2kV for all others electrical input pins, tested per MIL-STD-883G, Method 3015.4 /JESD22-A114-A (HBM). However, normal ESD precautions are still required during the handling of this module.



LASER SAFETY

This is a Class1 Laser Product according to IEC 60825-1:2007. This product complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated (June 24, 2007).

The optical ports of the module need to be terminated with an optical connector or with a dust plug in order to avoid contamination.

Order Information

Part Numbers	Descriptions
SKY-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
SKY-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
SKY-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
SKY-EDFAMUX8X10G-20-27/43-50-S	8Ch 8x10G 120KM EDFAMUX, EDFA, Red/Blue Filter, Simplex, Mux Channels 20-27, Demux 43-50
SKY-EDFAMUX8X10G-50-43/27-20-S	8Ch 8x10G 120KM EDFAMUX, EDFA, Red/Blue Filter, Simplex, Mux Channels 43-50, Demux 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	

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

Skylane is a leading provider of transceivers for optical communication.

We offer an extensive portfolio for the enterprise, access, datacenter and metropolitan fiber optical market as well as for smart home applications and home networks.

We cover the European, South American and North American market with a strong partner network and have offices in Belgium, Brazil, Sweden and USA.

Our offerings are characterized by high quality and performance. In combination with our strong technical support, we enable our customers to build cost optimized network solutions.

We offer an extensive range of high-quality products including transceivers (Optical and copper), Active Optical Cable (AOC), Direct Attach Cable (DAC), Mux/Demux, Coding Box (TCS).

