

## **100G EDFAMUX Simplex**

Active MUX with built-in EDFAs and Tunable Dispersion Compensator, C-Band 100Ghz, Dual AC 100/240V. Built-in LAN+WLAN to access internal webserver for monitoring and configuration, 1RU 19" casing

#### **Product Description**

This 100G 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 for bidirectional optical communication over a single fiber. 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 100G over Simplex SMF 5km to 80km
- 8 x 100G DWDM Channels
- 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-8X100G-29-36-S-80	8 Channel C-Band Active MUX EDFAs and Tunable Dispersion Compensator, ITU		
	100GHz, Channels 29-36, 8x100G, Simplex, 80km, Power Budget 18dB		
SKY -EDFAMUX-8X100G-42-49-S-80	8 Channel C-Band Active MUX EDFAs and Tunable Dispersion Compensator, ITU		
	100GHz, Channels 42-49, 8x100G, Simplex, 80km, Power Budget 18dB		

## **Mux Specifications**

Parameter	Specifications	Units	
Channel Spacing	0.8	nm	
Operation Wavelength Range	Default Ch 29-36 Ch 42-49	ITU 100 GHz	
Channel Center Wavelength (CWL)	ITU ± 0.11	nm	
Max Channel Insertion Loss	2.5	dB	
Isolation – Adjacent Channel	30	dB	
Isolation – Non-Adjacent Channel	45	dB	
Return Loss @ CWL	45	dB	
Monitor Port	1%	%	

**EDFA Booster Specifications** 

Parameter	Specifications	Units	
EDFA Operating Mode	AGC		
Input Power Range	-15 - +8	dBm	
Typical Noise Figure	4.5	dB	
Typical Pump Power	Tunable 6-12	dB	
Saturation	20	dBm	

**EDFA Post-Amp. Specifications** 

Parameter	Specifications	Units	
EDFA Operating Mode	AGC		
Input Power Range	-15 to +8	dBm	
Typical Noise Figure	4.5	dB	
Typical Pump Power	Adjustable 14-20	dB	
Saturation	20	dBm	

**Dispersion Compensator Specifications** 

Parameter	Specifications	Units
DCM Type	Fiber Bragg Grating	
Dispersion Compensating	0 to -1300	ps/nm
Insertion Loss	4	dB

**Casing Specifications** 

Parameter	Specifications	Units
Input Power	100-240	AC/V
	36-72	DC/V
Dimensions	482.6*300*44mm	mm
Operating Temperature	-5 to 60	°C
Power Consumption	<11	W
Airflow	Side-to-Side	

## **DWDM Wavelengths**

### **ITU 100GHz Channels**

ITU Channel	Wavelength (nm)	Frequency (THz)	ITU Channel	Wavelength (nm)	Frequency (THz)
Number			Number		
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).











