## C-DWDM8X400G-EDFAMUX-120-UPG

8Ch Active MUX with built-in EDFA amplifiers, up to 8 x 400G to reach a max of 120km

### Features

- Combines a 1RU 19" standalone passive MUX and EDFAs into one active rack unit device
- Up to 8 lines of 400Gbps from 60km up to 120km
- Net power budget of up to 30dB loss in the fiber link with 100% port population
- Channels 20-27 C-band 100GHz (extension port available at channels 17 to 19 and 28 to 60)
- Additional channels are available upon request
- Web, SNMP, SYSLOG, and HTTP API monitoring
- 1% monitor port
- 1625nm port for external OTDR (inline)
- Adjustable auto-gain control mode (adding some dB when extra channels are plugged in)
- Default LC/UPC with auto-dust shutters

### Product Description

8Ch Active MUX with built-in EDFA amplifiers, up to 8 x 400G to reach max of 120km, Net Power Budget 30dB (calculation based on 100% population of ports), Channels 20-27 C-Band 100Ghz, Extension port (CH17-19 & 28-60), 1625nm Port for external OTDR and 1% Monitor port, Dual AC 100/240V, ethernet and console management ports, 1RU 19" enclosure.

**Mux Specifications**

| Parameter | Specification | Symbol |
|---|---|---|
| Channel Spacing | 0.8 | nm |
| Operation Wavelength Range | Default Ch 20-27 | ITU 100GHz |
| Channel Center Wavelength (CWL) | ITU ± 0.11 | nm |
| Maximum Channel Insertion Loss | 2.5 | dB |
| Adjacent Channel Isolation | 30 | dB |
| Non-Adjacent Channel Isolation | 45 | dB |
| Return Loss @ CWL | 45 | dB |
| Monitor Port | 1 | % |

**EDFA Booster Specifications**

| Parameter | Specification | Symbol |
|---|---|---|
| EDFA Operating Mode | AGC | |
| Input Power Range | -15 to +8 | dBm |
| Typical Noise Figure | <4.5 | dB |
| Typical Pump Power | Tunable 10-16 | dB |
| Saturation | 20 | dBm |

**EDFA Pre-Amp Specifications**

| Parameter | Specification | Symbol |
|---|---|---|
| EDFA Operating Mode | AGC | |
| Input Power Range | -30 to -5 | dBm |
| Typical Noise Figure | <4.5 | dB |
| Typical Pump Power | Tunable 12 to 18 | dB |
| Saturation | 20 | dBm |

**Management Module**

1. The EDFAMUX comes standard with an integrated management module with LAN and console connectivity. By using LAN, you can configure and monitor the system over GUI, SNMP, SYSLOG, or HTTP API.
2. The operating settings are stored in the device itself. Rebooting the management module or upgrading its firmware won't interrupt communication.
3. For information about how to configure the EDFAMUX, please refer to the EDFAMUX manual provided with the unit or download it from our website.

## 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.

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