



## PRODUCT DATA SHEET

# Optical Transceiver: DWDM-10G-XFP-120-46

### Description:

DWDM-10G-XFP-120-46 is a multi-vendor compatible XFP Transceiver module, operating over double fiber single-mode optical cable with maximum distance 120km. DWDM-10G-XFP-120-46 uses Ch. 46 (1540.56 nm) transmitting EML laser and APD receiver supporting all ITU-T C-Band 100GHz Channel Spacing DWDM grid (Ch.17 - Ch.61) and supports 1.24-11.3Gbps data rates.

DWDM-10G-XFP-120-46 XFP Transceiver is fully compliant to XFP Multi Source Agreement INF-8077i and it can be provided with custom-encoded firmware, in order to provide compatibility of most equipment vendors platforms in data communications industry.

### Key Highlights:

- **Type:** XFP
- **Tx/Rx Wavelength:** Ch 46 (1540.56 nm)/ ITU-T DWDM Grid 100 GHz C-Band
- **Media Type:** Single-Mode Fiber
- **Optical Budget:** 26 dB
- **Max. Distance:** 120 km
- **Data Rate:** 1.24-11.3Gbps
- **Temperature:** Standard 0°-70°C

# TECHNICAL SPECIFICATION

| Parameter                            | Value   |
|--------------------------------------|---|
| <b>Product Type:</b>                 | DWDM-10G-XFP-120-46   |
| <b>Media Type:</b>                   | Single-Mode Fiber   |
| <b>TX Wavelength:</b>                | Ch 46 (1540.56 nm)  |
| <b>RX Wavelength:</b>                | 1270-1610 nm  |
| <b>Minimum Optical Budget:</b>       | 26 dB   |
| <b>Maximum Distance:</b>             | 120 km  |
| <b>Supported Data Rate:</b>          | 1.24-11.3Gbps   |
| <b>Supported Applications:</b>       | <ul style="list-style-type: none"> <li>• 10G Eth (10.31Gbps)</li> <li>• 1G Eth (1.25Gbps)</li> <li>• STM-64 (9.95Gbps)</li> <li>• STM-16 (2.488 Gbps)</li> <li>• OTU1 (2.66Gbps)</li> <li>• OTU2 (10.70Gbps)</li> <li>• OTU1e (11.049Gbps)</li> <li>• OTU2e (11.095Gbps)</li> <li>• OTU1f (11.27Gbps)</li> <li>• OTU2f (11.32Gbps)</li> <li>• ODU0 (1.244Gbps)</li> <li>• ODU1 (2.498Gbps)</li> <li>• ODU2 (10.037Gbps)</li> <li>• ODU2e (10.399Gbps)</li> <li>• 10G FC (10.52 Gbps)</li> <li>• 8.5G FC (8.5 Gbps)</li> <li>• 4G FC (4.25 Gbps)</li> <li>• 2G FC (2.125 Gbps)</li> <li>• 1G FC (1.0625 Gbps)</li> </ul> |
| <b>DDM/DOM:</b>                      | Supported   |
| <b>Temperature Range:</b>            | Standard 0°-70°C  |
| <b>Connectors:</b>                   | Double LC   |
| <b>Tx Wavelength Bandwidth:</b>      | 100GHz (0.8nm)  |
| <b>Rx Wavelength Bandwidth:</b>      | 1260 - 1620 nm  |
| <b>Transmitting Power (Min/Max):</b> | 0 / 6 dB  |
| <b>Receiver Sensitivity:</b>         | -26 dB  |
| <b>Receiver Overload:</b>            | -10 dB  |

| Parameter             | Value  |
|-----------------------|--|
| <b>Dispersion:</b>    | 2600-2800 ps/nm  |
| <b>Laser:</b>         | EML  |
| <b>Receiver Type:</b> | APD  |
| <b>Chip:</b>          | SEMTECH/MAXIM/MINDSPEED  |
| <b>Power:</b>         | +3.3V single power supply  |
| <b>Compliance:</b>    | XFP MSA, RoHS, CE, Class 1 FDA and IEC60825-1 Laser Safety Compliant |

## Compatibility

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more than 50 vendor brands in data and telecom communications industry:

**MS** - General MSA  
**AD** - ADVA  
**AL** - Alcatel-Lucent  
**AR** - Arista  
**AV** - Avaya  
**BR** - Brocade  
**CN** - Ciena  
**CI** - Cisco  
**DL** - Dell & Force10  
**DK** - D-Link  
**EM** - EMC2  
**ET** - Enterasys

**ER** - Ericsson  
**EX** - Extreme Networks  
**F5** - F5 Networks  
**FO** - Fortinet  
**FU** - Fujitsu  
**H3** - H3C  
**HI** - Hirschmann  
**HP\*** - HP Networking  
**HS\*** - HP Storage  
**HU** - Huawei  
**IB** - IBM  
**IF** - Infinera

**IN** - Intel  
**JU** - Juniper Networks  
**LI** - Linksys  
**ML** - Mellanox  
**ME** - Meraki (Cisco)  
**MT** - MikroTik  
**MO** - Moxa  
**MR** - MRV  
**NG** - Netgear  
**NS** - NSN  
**PA** - Palo Alto Network  
**QL** - Qlogic

**RD** - RAD  
**RU** - Ruijie Networks  
**SM** - Supermicro  
**SY** - Synology  
**TC** - Telco Systems  
**TP** - TP-LINK  
**TN** - Trendnet  
**WG** - WatchGuard  
**ZT** - ZTE  
**XX** - Other

\* - Please note HP compatible module prices can be higher than prices indicated in this material due to special requirements in coding. If you require HP compatibility, for exact pricing please contact our sales team: [sales@edgeoptic.com](mailto:sales@edgeoptic.com)

## Product Quality

We focus on strict product quality tests before each delivery, performing optical parameter tests, connector cleanliness tests and firmware verification tests to ensure our delivered products fully meet the promised product technical specification and compatibility requirements.

EDGE Optical transceivers are CE, ROHS certified and have passed Telecordia reliability tests.

## Warranty

EDGE Optic's provides a limited **warranty for sixty (60) months** from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship.