

## ge Product Data Sheet

### Key Highlights:

• Type: SFP

• Compatibility: Multi-Vendor MSA Compatible

Tx Wavelength: 1490 nm.Rx Wavelenght: 1310 nm.

• Media Type: Single-Mode Fiber (SMF)

Optical Budget: 13 dB
Max. Distance: 20 km
Data Rate: 1.063-1.25Gbps

• Temperature: Industrial -45°C - +85°C



### Optical Transceiver: BIDI-1.25G-SFP-21-BDI

### **Product Description:**

BIDI-1.25G-SFP-21-BDI is Multi-Vendor MSA Compatible SFP (Small Form factor Pluggable) Transceiver, operating over Single Fiber Single-Mode Fiber (SMF) optical cable. It has minimum guaranteed optical budget of 13 dB, with in most cases is enough to reach about 20 km distance. However, distance is just indicative parameter calculated for comfort of identification. Eventually we calculate distance taking in account minimal optical budget and average attenuation of optical cabling in industry. This transceiver use top quality DFB Laser transmitter with operating at nominal wavelength 1490 nm. and 1310 nm. PIN Photodiode receiver. It support DDM/DOM optical diagnostics, with provide diagnostic information about the present operating conditions. BIDI-1.25G-SFP-21-BDI operates in Industrial -45°C - +85°C temperature range and has Single LC interface. SFP support 1.063-1.25Gbps data rate and such applications as Gigabit Ethernet (1.25 Gbps)|1G Fiber Channel (1.0625 Gbps). BIDI-1.25G-SFP-21-BDI SFP Single Fiber optical transceiver is multi-purpose module used in number of different places of today's networking. Consequently, most popular applications are Gigabit Ethernet communication links in extreme industrial environment, Enterprice LAN & SAN Networks with high or low environment temperature demand Data Center LAN & SAN Networks and other optical links.

Transceiver is CE/RoHS certified and it is Compliant with product safety standards. BIDI-1.25G-SFP-21-BDI SFP Transceiver is fully compliant to SFP Multi Source Agreement INF-8074i. Consequently, it means that module is compatible with 80% of networking equipment, where is not implemented a special algorithm for protection against third party modules. However – we can provide SFP transceiver with custom-encoded firmware in order to make it work almost in any equipment. Therefore, we will be glad to know what your requirement is. Because our focus is providing top quality service, we are performing serious quality checks before delivery of our products. As a result, we do optical parameter measurements, connector cleanness tests and SFP transceiver EEPROM memory data validation tests.







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## **Product Specification:**

| Parameter                   | Value  |
|-----------------------------|--|
| Media Type:                 | Single-Mode Fiber (SMF)  |
| Tx Wavelength:              | 1490 nm.   |
| Rx Wavelength:              | 1310 nm.   |
| Minimum Optical Budget:     | 13 dB  |
| Maximum Distance:           | 20 km  |
| Supported Data Rate:        | 1.063-1.25Gbps   |
| Supported Applications:     | Gigabit Ethernet (1.25 Gbps) 1G Fiber Channel (1.0625 Gbps)                      |
| DDM/DOM:                    | Support  |
| Temperature Range:          | Industrial -45°C - +85°C   |
| Connectors:                 | Single LC  |
| Tx Wavelength Bandwidth:    | 40 nm (1470-1510 nm)   |
| Rx Wavelength Bandwidth:    | 40 nm (1290-1330 nm)   |
| Minimum Transmitting Power: | -9 dB  |
| Maximum Transmitting Power: | -3 dB  |
| Receiver Sensitivity:       | -22 dBm  |
| Receiver Overload:          | -3 dBm   |
| Dispersion:                 | 430-500 ps/nm  |
| Transmitter Type:           | DFB Laser  |
| Receiver Type:              | PIN Photodiode   |
| Sidemode Suppression Ratio: | 35 dB  |
| Max. Receiver Reflectance:  | - 12 dB  |
| Power:                      | +3.3V single power supply  |
| Power Consumption:          | 150mA  |
| MTBF value at 35 °C:        | 1'000'000 Hours.   |
| Chip-set:                   | MAXIM MINDSPEED SEMTECH  |
| Compliance:                 | CE Class 1 FDA and IEC60825-1 Laser Safety Compli-<br>ant RoHS INF-8074i SFP MSA |





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### Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more then 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 **FO** - Fortinet

**ER** - Ericsson

**FU** - Fujitsu **H3** - H3C

**HI** - Hirschmann

F5 - F5 Networks

**HP\*** - HP Networking

**EX** - Extreme Networks

**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

### 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.



