

## Key Highlights:

- Type: cSFP
- Compatibility: Multi-Vendor MSA Compatible
- Tx Wavelength: 1310 nm
- Rx Wavelength: 1490 nm
- Media Type: Single-Mode Fiber (SMF)
- Optical Budget: 14.0 dB
- Max. Distance: 20 km
- Data Rate: 1.063-1.25 Gbps
- Temperature: Industrial -40 to 85°C



## Optical Transceiver: 1.25G-cSFP-21-ADI

### Product Description:

1.25G-cSFP-21-ADI is Multi-Vendor MSA Compatible cSFP (Compact Size Small Form factor Pluggable) Transceiver, allowing to establish two separate Gigabit Ethernet links, each operating over one fiber of Single-Mode Fiber (SMF) optical cable. It has minimum guaranteed optical budget of 14 dB in each of two links, 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. For each separate data lane this transceiver use top quality FP Laser transmitter with operating at nominal wavelength 1310 nm and 1490 nm PIN Photodiode receiver. It support DDM/DOM optical diagnostics, with provide diagnostic information about the present operating conditions. 1.25G-cSFP-21-ADI operates in Industrial -40 to 85°C temperature range and has Double LC interface. cSFP support 1.063-1.25Gbps data rate and such applications as Gigabit Ethernet (1.25 Gbps) and 1G Fiber Channel (1.0625 Gbps). 1.25G-cSFP-21-ADI cSFP Single Fiber compact size optical transceiver were designed to save equipment ports and footprint and is capable to establish two separate bidirectional optical links. Most popular application of cSFP modules is FTTH connections using cSFP in access switch equipment interfacing towards CPE units supporting bidirectional communication or together with other compatible bidirectional transceivers.

Transceiver is CE/RoHS certified and it is Compliant with product safety standards. 1.25G-cSFP-21-ADI cSFP Transceiver is fully compliant to compact Small Form-Factor Pluggable (CSFP) MSA option 2 and SFF-8472. 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 cSFP 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 cleanliness tests and cSFP transceiver EEPROM memory data validation tests.



## Product Specification:

Parameter	Value
Media Type:	Single-Mode Fiber (SMF)
Tx Wavelength:	1310 nm
Rx Wavelength:	1490 nm
Minimum Optical Budget:	14 dB
Maximum Distance:	20 km
Supported Data Rate:	1.063-1.25 Gbps
Supported Applications:	Gigabit Ethernet (1.25 Gbps), 1G Fiber Channel (1.0625 Gbps)
DDM/DOM:	Supported
Temperature Range:	Industrial -40 to 85°C
Connectors:	Double LC
Tx Wavelength Bandwidth:	100nm (1260-1360nm)
Rx Wavelength Bandwidth:	20nm (1480-1500nm)
Minimum Transmitting Power:	-9 dB
Maximum Transmitting Power:	-3 dB
Receiver Sensitivity:	-23 dBm
Receiver Overload:	-3 dBm
Dispersion:	140-160 ps/nm
Transmitter Type:	FP Laser
Receiver Type:	PIN Photodiode
Sidemode Suppression Ratio:	30 dB
Power Consumption:	+3.3V single power supply
MTBF value at 35 °C:	1 000 000 Hours
Chip-set:	SEMTECH/MAXIM/MINDSPEED/UX
Compliance:	CSFP MSA option 2, 1000Base BX20 IEEE802.3ah, SFF-8472, RoHS, IEEE 802.3z, Class 1 Laser EN 60825-1



## 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

## 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.

