

## Key Highlights:

- **Type:** SFP28
- **Tx Wavelength:** 1270 nm - 1370 nm; 1470nm - 1610nm
- **Rx Wavelength:** G.694.2 CWDM Grid (1270-1610nm)
- **Media Type:** Single- Mode Fiber
- **Fiber Type:** Single-Mode Fiber (SMF)
- **Optical Budget:** 6.3 dB
- **Max. Distance:** 10km
- **Data Rate:** 8.5-28.1 Gbps
- **Temperature:** Industrial -45°C – +85°C



## Optical Transceiver : CWDM-25GFH-SFP28-10I-XX

### Product Description:

CWDM-25GFH-SFP28-10I-XX is an Industrial Temperature Ch. 27 – Ch. 61 (1270nm – 1610nm) CWDM 25GE LR eCPRI (enhanced CPRI) / CPRI Fronthaul Multi-Vendor MSA Compatible SFP28 (Small Form-Factor Pluggable 28) Transceiver, operating over Double Fiber Single-Mode Fiber (SMF) optical cable. It has minimum guaranteed optical budget of 6.3 dB, which in most cases is enough to reach 10 km over OS2 fiber. However, distance is just indicative parameter for comfort of identification that is calculated by taking into account minimal optical budget and average attenuation of optical cabling in industry. CWDM-25GFH-SFP28-10I-XX uses top quality DFB (Distributed Feedback Laser) transmitter and 25Gb/s PIN photodiode receiver. CWDM-25GFH-SFP28-10I-XX Industrial Temperature Ch. 27 – Ch. 61 (1270nm – 1610nm) CWDM 25GE LR eCPRI / CPRI supports DDM/DOM optical diagnostics that provide real-time diagnostic information about the present operating conditions. CWDM-25GFH-SFP28-10I-XX operates in Industrial -45°C – +85°C temperature range and has Double LC interface. CWDM-25GFH-SFP28-10I-XX Industrial Temperature Ch. 27 – Ch. 61 (1270nm – 1610nm) CWDM 25GE LR eCPRI / CPRI SFP28 support 8.5-28.1 Gbps data rate and eCPRI / CPRI Option 10 (24.33 Gbps), CPRI Option 9 (12.165 Gbps), CPRI Option 8 (10.138 Gbps), CPRI option 7 (9.830 Gbps) applications.



CWDM-25GFH-SFP28-10I-XX SFP28 Double Fiber optical transceiver is multi-purpose module used in number of different places of today's networking. Consequently, most popular use cases are in Mobile Carrier Networks, this 5G fronthaul and O-RAN (open radio access network) applications.

CWDM-25GFH-SFP28-10I-XX Industrial Temperature Ch. 27 – Ch. 61 (1270nm – 1610nm) CWDM 25GE LR eCPRI / CPRI SFP28 transceiver is CE/RoHS certified and is compliant with product safety standards. CWDM-25GFH-SFP28-10I-XX is fully compliant to SFF-8431 and SFF-8472 Multi Source Agreement (MSA), eCPRI, CPRI and IEEE 802.3by 25 Gb/s specification. Consequently, compliance to above standards guarantees that module is compatible and works with majority of networking equipment, where is not implemented special algorithm for protection against third party modules. However – our technical team has accumulated deep expertise in custom-encoded firmware's for Ch. 27 – Ch. 61 (1270nm – 1610nm) CWDM 25GE LR eCPRI / CPRI SFP28 transceiver in order to make it work in almost any brand equipment. We will be glad to

## Product Specification:

| General parameter             | Value   |
|-------------------------------|---|
| Media Type:                   | Single-Mode Fiber (SMF)   |
| Connectors:                   | Double LC   |
| TX Wavelength:                | Ch. 27 - Ch. 61 (1270nm - 1610nm)   |
| RX Wavelength:                | G.694.2 CWDM Grid (1270nm - 1610nm)   |
| Minimum Optical Budget:       | 6.3 dB  |
| Maximum Distance:             | 10 km   |
| Supported Data Rate:          | 8.5-28.1 Gbps   |
| Supported Applications:       | 25G Ethernet (25.78Gbps), 10G Ethernet (10.31Gbps)  |
| DDM/DOM:                      | Supported   |
| Temperature Range:            | Industrial -45°C – +85°C  |
| Power Supply Voltage Typical: | +3.3V single power supply   |
| Compliance:                   | RoHS-6, SFF-8432, CE, Class 1 FDA and IEC60825-1 Laser Safety Compliant, SFF-8402, SFF-8431, SFF-8472, SFP+ MSA |



## Product Specification:

| Transmitter Parameters:     | Value                   |
|-----------------------------|-------------------------|
| Transmitter Type:           | EML Laser               |
| Tx Wavelength Bandwidth:    | 20 nm (1270nm - 1610nm) |
| Minimum Transmitting Power: | -7 dB                   |
| Maximum Transmitting Power: | 2 dB                    |

| Receiver Parameters:     | Value                         |
|--------------------------|-------------------------------|
| Receiver Type:           | PIN                           |
| Rx Wavelength Bandwidth: | G.694.2 grid: 1270nm - 1610nm |
| Receiver Sensitivity:    | -13.3 dBm                     |
| Receiver Overload:       | 2.2 dBm                       |



## Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more than 100 vendor brands in data and telecom communications industry:

**MS** - General MSA

**AD** - ADVA

**AE** - Advantech

**AL** - Alcatel (Nokia)

**AT** - Allied Telesis

**AR** - Arista

**AS** - Arris

**AV** - Avaya

**BC** - Barracuda

**BR** - Broadcom

**QL** - Cavium (Qlogic)

**CR** - Ceragon

**CP** - Checkpoint

**CH** - Chelsio

**CN** - Ciena

**CI** - Cisco

**LI** - Cisco (Linksys)

**CE** - Comnet

**CO** - Coriant

**DH** - Dahua

**DC** - DCN

**DL** - Dell & Force10

**DK** - D-Link

**DZ** - DZS(Dasan-Zhone)

**EI** - ECI

**EC** - EdgeCore

**EW** - EdgeWare

**EL** - Eltex

**EM** - EMC2

**EN** - Enterasys

**ER** - Ericsson

**EF** - EXFO

**EX** - Extreme Networks

**F5** - F5 Networks

**FI** - Finisar

**FO** - Fortinet

**FU** - Fujitsu

**H3** - H3C

**HI** - Hirschmann

**HU** - Huawei

**IB** - IBM

**IF** - Infinera

**IN** - Intel

**IX** - Ixia

**JU** - Juniper Networks

**KM** - KeyMile

**KY** - KyLand

**LN** - Lenovo

**ML** - Mellanox

**ME** - Meraki (Cisco)

**MT** - MikroTik

**MO** - Moxa

**MR** - MRV

**NC** - NEC

**NG** - Netgear

**NK** - Nokia

**NT** - Nortel

**NS** - NSN

**OR** - Oracle

**PA** - Palo Alto Network

**PL** - Planet

**QC** - QCT(Quanta)

**QN** - QNAP

**RD** - RAD

**RW** - RadWare

**RC** - Raisecom

**RK** - Ruckus

**RU** - Ruijie Networks

**SG** - Samsung

**SV** - Sandvine

**SC** - Silicom

**SF** - SolarFlare

**SW** - Sonicwall

**SM** - Supermicro

**SY** - Synology

**TC** - Telco Systems

**TP** - TP-LINK

**TN** - Trendnet

**UN** - Ubiquiti Networks

**VX** - VeEx

**WG** - WatchGuard

**WS** - Waystream

**WT** - Westermo

**ZT** - ZTE

**ZX** - Zyxel

**HP** - HP

**AG** - Avago

**OC** - Oclaro

**EU** - Emulex

**TM** - Transmode

**AU** - HP Aruba

**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.

## Ordering Information:

| Part Number              | Data Rate     | Applications | Temperature Range | Available DWDM Channels                                       |
|--------------------------|---------------|--------------|-------------------|---|
| CWDM-25GFH-SFP28-10I-XX* | 8.5-28.1 Gbps | Up to 10 km  | -45°C – +85°C     | <b>27 to 61</b><br>ITU-T 100Ghz C-Band 1563.86nm to 1528.77nm |

\*XX represents the chosen channel, thus Ch.27 would be CWDM-25GFH-SFP28-10I-27 (1270nm)

