

Key Highlights:

- **Type:** SFP+
- **Tx Wavelength:** Ch. 27 to Ch. 61 (1270nm – 1610nm)
- **Rx Wavelength:** G.694.2 CWDM Grid (1270-1610nm)
- **Media Type:** Single- Mode Fiber
- **Fiber Type:** Single-Mode Fiber (SMF)
- **Optical Budget:** 13 dB
- **Max. Distance:** 40 km
- **Data Rate:** 1.228-10.138 Gbps
- **Temperature:** Industrial -45°C - +85°C



Optical Transceiver : CWDM-10GFH-SFP-40I-XX

Product Description:

CWDM-10GFH-SFP-40I-XX is Multi-Vendor MSA Compatible SFP+ (Small Form factor Pluggable) Transceiver, operating over Double Fiber CWDM Single-Mode Fiber (SMF) optical cable. It has minimum guaranteed optical budget of 13 dB, with in most cases is enough to reach about 40 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 Ch. 27 – Ch. 61 (1270nm – 1610nm) PIN Photodiode receiver. It support DDM/DOM optical diagnostics, with provide diagnostic information about the present operating conditions. CWDM-10GFH-SFP-40I-XX operates in Industrial -45°C – +85°C temperature range and has Double LC interface. SFP+ support 1.228-10.138 Gbps data rate and such applications as CPRI option 2 (1228.8 Mbps)|CPRI option 3 (2.458 Gbps)|CPRI option 5 (4.915 Gbps)|CPRI option 6 (6.144 Gbps)|CPRI option 7 (9.830 Gbps)|CPRI option 8 (10.138 Gbps)|OBSAI RP3 x 2 (1.536 Gbps)|OBSAI RP3 x 4 (3.072 Gbps)|OBSAI RP3 x 8 (6.144 Gbps).



CWDM-10GFH-SFP-40I-XX SFP+ Double Fiber CWDM optical transceiver is multi-purpose module used in number of different places of today's networking. Consequently, most popular applications are CPRI LTE 4G RRU and BBU Interconnections in C-RAN Fronthaul, OBSAI LTE 4G RRU and BBU Interconnections in C-RAN Fronthaul, and other optical links.

Transceiver is CE/RoHS certified and it is Compliant with product safety standards. CWDM-10GFH-SFP-40I-XX SFP+ Transceiver is fully compliant to SFP+ Multi Source Agreement SFF-8431. 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.

Product Specification:

General parameter	Value
Media Type:	Single-Mode Fiber (SMF)
Connectors:	Double LC
TX Wavelength:	Ch. 27 to Ch. 61 (1270nm – 1610nm)
RX Wavelength:	G.694.2 CWDM Grid (1270-1610nm)
Minimum Optical Budget:	13 dB
Maximum Distance:	40 km
Supported Data Rate:	1.228-10.138 Gbps
Supported Applications:	CPRI option 2 (1228.8 Mbps) CPRI option 3 (2.458 Gbps) CPRI option 5 (4.915 Gbps) CPRI option 6 (6.144 Gbps) CPRI option 7 (9.830 Gbps) CPRI option 8 (10.138 Gbps) OBSAI RP3 x 2 (1.536 Gbps) OBSAI RP3 x 4 (3.072 Gbps) OBSAI RP3 x 8 (6.144 Gbps)
DDM/DOM:	Supported
Temperature Range:	Industrial -45°C - +85°C
Power Supply Voltage Typical:	+3.3V single power supply
Compliance:	CE Class 1 FDA and IEC60825-1 Laser Safety Compliant RoHS SFF-8431 SFP MSA



Product Specification:

Transmitter Parameters:	Value
Transmitter Type:	DFB Laser
Tx Wavelength Bandwidth:	20 nm (1260nm-1280nm)
Minimum Transmitting Power:	-3 dBm
Maximum Transmitting Power:	3 dBm

Receiver Parameters:	Value
Receiver Type:	PIN Photodiode
Rx Wavelength Bandwidth:	G.694.2 grid: 1270-1610 nm
Receiver Sensitivity:	-16 dBm
Receiver Overload:	0.5 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-10GFH-SFP-40I-XX*	1.228-10.138 Gbps	Up to 40 km	-45°C - +85°C	27 to 61 G.694.2 CWDM Grid (1270-1610nm)

*XX represents the chosen channel, thus Ch.27 would be CWDM-10GFH-SFP-40I-27 (1270nm)

