

# SFP-L120D-CXX 1.25 Gb/s CWDM SFP with up to 120 km range

# DESCRIPTION

The SFP-L120D-Cxx optical transceiver is fully compliant with the SFP Multi-Source Agreement (MSA). It meets the requirements of IEEE 802.3 Gigabit Ethernet standard and ANSI Fibre Channel specifications, and is very suitable for interconnections in Gigabit Ethernet and Fibre Channel environments. The modules are hot pluggable and digital diagnostic functions are available via an I2C serial bus specified in the SFP MSA SFF-8472.

The transceivers are high performance, cost effective modules supporting dual data-rates of 1.25 Gb/s and 1.0625 Gb/s and can operate over transmission distances up to 120 km on 9/125µm SM fiber. All transceivers have been tested according to European and American product safety and electromagnetic compatibility regulations.

CWDM modules operate at nominal Coarse Wavelength Division Multiplexing (CWDM) wavelengths. Eighteen center wavelengths are available for SFP-L120D-Cxx from 1271 nm to 1611 nm, with each step being 20 nm. The CWDM characteristics are fully compliant to the wavelength parameters specified in ITU standards G.694.2 and G.695.

### **APPLICATIONS**

- Gigabit Ethernet
- 1000Base-ZX
- 1x Fibre Channel
- CWDM systems

#### **FEATURES**

- Up to 120 km transmission on SMF
- Hot-Pluggable SFP+ footprint LC Optical Transceiver
- Duplex LC receptacle
- Small Form-Factor Pluggable (SFP) MSA compatible
- Digital Diagnostic Monitoring
- SFF-8472 Digital Diagnostic Function
- Single +3.3V Power Supply and LVTTL Logic
- Operating Case Temperature: 0°C to 70°C



## LASER SAFETY

This transceiver is a Class 1 laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module need to be terminated with an optical connector or a dust plug.

## **OPTICAL PARAMETERS**

| Part no.      | SM/MM<br>Fiber | Wavelength<br>[nm] | Opt. Output<br>Power<br>[dBm] | Opt. Receiver<br>Sensitivity [dBm] | Power<br>Budget<br>[dB] |
|---------------|----------------|--------------------|-------------------------------|------------------------------------|-------------------------|
| SFP-L120D-Cxx | SM/MM          | 1271~1611          | 0 to 5                        | -32 to -10                         | 32                      |



# **ORDERING INFORMATION**

| Part no.      | CWDM wavelength | Description  |
|---------------|-----------------|--|
| SFP-L120D-C27 | 1271 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1271nm, 32dB, SM/MM |
| SFP-L120D-C29 | 1291 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1291nm, 32dB, SM/MM |
| SFP-L120D-C31 | 1311 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1311nm, 32dB, SM/MM |
| SFP-L120D-C33 | 1331 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1331nm, 32dB, SM/MM |
| SFP-L120D-C35 | 1351 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1351nm, 32dB, SM/MM |
| SFP-L120D-C37 | 1371 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1371nm, 32dB, SM/MM |
| SFP-L120D-C39 | 1391 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1391nm, 32dB, SM/MM |
| SFP-L120D-C41 | 1411 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1411nm, 32dB, SM/MM |
| SFP-L120D-C43 | 1431 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1431nm, 32dB, SM/MM |
| SFP-L120D-C45 | 1451 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1451nm, 32dB, SM/MM |
| SFP-L120D-C47 | 1471 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1471nm, 32dB, SM/MM |
| SFP-L120D-C49 | 1491 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1491nm, 32dB, SM/MM |
| SFP-L120D-C51 | 1511 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1511nm, 32dB, SM/MM |
| SFP-L120D-C53 | 1531 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1531nm, 32dB, SM/MM |
| SFP-L120D-C55 | 1551 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1551nm, 32dB, SM/MM |
| SFP-L120D-C57 | 1571 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1571nm, 32dB, SM/MM |
| SFP-L120D-C59 | 1591 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1591nm, 32dB, SM/MM |
| SFP-L120D-C61 | 1611 nm         | SFP, 1.25 Gbps Ethernet, DDM, 120km, 1611nm, 32dB, SM/MM |