S1G-L160-Cxx

1.25 Gb/s CWDM SFP | Up to 160 km | 37 dB | DDM

1. Product overview

The GLOBALfiber S1G-L160-Cxx CWDM optical transceiver family supports dual data rates of 1.25 Gb/s and 1.0625 Gb/s for Gigabit Ethernet and Fibre Channel interconnections. The modules support transmission distances up to 160 km on 9/125 um single-mode fiber. Eight center wavelengths are available from 1471 to 1611 nm in 20 nm steps.

2. Key features

- Hot-pluggable SFP MSA-compatible module
- Duplex LC optical receptacle
- Eight CWDM wavelengths: 1271-1611 nm, 20 nm spacing
- Digital Diagnostic Monitoring (DDM) per SFF-8472
- Single +3.3 V supply and LVTTL logic
- Operating case temperature: 0°C to +70°C

3. Applications

1000Base Ethernet • 1x Fibre Channel • CWDM systems



4. Technical data

Parameter	Specification
Form factor	SFP; MSA compatible
Data rates	1.25 Gb/s and 1.0625 Gb/s
Optical connector	Duplex LC
Transmission distance	Up to 160 km on 9/125 um single-mode fiber
Wavelength options	1271-1611 nm
CWDM spacing	20 nm
Electrical logic	LVTTL
Hot-pluggable	Yes

5. Recommended operating conditions

Parameter	Specification
Operating case temperature	0°C to +70°C
Supply voltage	Single +3.3 V
Power dissipation / supply current	Not specified
Storage temperature	Not specified

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6. Optical characteristics

Parameter	Specification
Wavelength range	1271-1611 nm
Channel spacing	20 nm
Optical output power	+2 to +6 dBm
Optical receiver sensitivity	-34 to -10 dBm
Optical power budget	36 dB
Fiber type in optical table	SM

The receiver sensitivity range is retained as specified; its upper value is not reclassified as overload. The stated 160 km reach applies to 9/125 um single-mode fiber in the product description.

7. Digital diagnostics and management

Digital diagnostic functions are available through an I²C serial bus, as specified in SFF-8472. Diagnostic accuracy, monitoring ranges and alarm thresholds are not specified.

8. Safety and regulatory

SFP MSA; IEEE 802.3 Gigabit Ethernet; ANSI Fibre Channel; ITU-T G.694.2 and G.695. Class 1 laser product compliant with IEC 60825 and FDA 21 CFR 1040.10 and 1040.11. Operate within the specified temperature and voltage limits. Terminate optical ports with an optical connector or dust plug.

9. Ordering information

Parameter	Specification
S1G-L160-Cxx	1271-1611 nm; SFP, 1000Base Ethernet, DDM, 160 km, 36 dB, SM

Family product number: S1G-L160-Cxx. xx identifies the CWDM wavelength option. Technical values are retained from the supplied original.