

SFPDD-XGSOLT-C2-I

SFPDD XGSPON/GPON OLT 1577T/1270R 40 C++ | 9.95T/9.95R-2.4T/1.2R SC I-Temp

1. Product overview

SFP-DD XGS-PON / GPON Combo OLT Transceiver - C++ Class, 40 km, Industrial Temperature
The transceiver is built in an SFP-DD form factor and qualified for industrial temperature operation, making it suitable for central offices, remote nodes, and outdoor cabinets.

2. Key features

- Single-fiber bidirectional transmission
- XGS-PON / XG-PON / GPON Combo OLT support
- C++ optical class, up to 40 km reach
- SFP-DD form factor with SC/UPC connector
- Hot-pluggable
- Industrial temperature range: -40 °C to +85 °C
- High-power downstream transmitters (EML / DFB)
- High-sensitivity APD receivers
- Digital Diagnostic Monitoring (DDM)
- RX_SD and RX_LOS indications for XGS-PON and GPON
- Low EMI and excellent ESD protection
- RoHS-10 compliant

3. Applications

PON access networks; OLT-side deployment.

4. Technical data

Technical specifications	Continued (read down each column)
Supply voltage: 3.3 V	Management interface: I2C (SFF-8472 compatible)
Power consumption: = 3.5 W	Optimized burst-mode timing for OLT operation
Operating current: up to 1100 mA	

5. Recommended operating conditions

- Form factor: SFP-DD
- Optical connector: SC/UPC
- Teknisk info

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6. Optical characteristics

Optical specifications	Continued (read down each column)
XGS-PON Transmitter (Downstream)	Sensitivity: down to -31 dBm
Wavelength: 1577 nm (EML laser)	Saturation power: -10 dBm
Data rate: 9.953 Gbps	Maximum input power: 0 dBm
Launch power: +7 to +10 dBm	Burst-mode operation with fast recovery
Extinction ratio: = 8.2 dB	XG-PON Receiver (Upstream)
Transmission distance: up to 60 km over SMF	Wavelength: 1260-1280 nm
GPON Transmitter (Downstream)	Sensitivity: down to -32.5 dBm
Wavelength: 1490 nm (DFB laser)	Saturation power: -12 dBm
Data rate: 2.488 Gbps	Burst-mode receiver
Launch power: +5 to +9 dBm	GPON Receiver (Upstream)
Extinction ratio: = 8.2 dB	Wavelength: 1290-1330 nm
Transmission distance: up to 60 km over SMF	Sensitivity: down to -34 dBm
Receiver Characteristics	Saturation power: -14 dBm
XGS-PON Receiver (Upstream)	Maximum input power: +5 dBm
Wavelength: 1260-1280 nm	Burst-mode receiver with RSSI support

7. Digital diagnostics and management

Monitors in real time:
Module temperature
Supply voltage
Laser bias current (10G / 2.5G)
TX optical power (XGS-PON & GPON)
RX optical power (XGS-PON, XG-PON, GPON)

8. Safety and regulatory

XGS-PON - ITU-T G.9807.1
XG-PON - ITU-T G.987.2
GPON - ITU-T G.984.2
SFF-8472 Digital Diagnostics
FCC 47 CFR Part 15, Class B

9. Ordering information

GLOBALfiber part number	Product description
SFPDD-XGSOLT-C2-I	SFPDD XGSPON/GPON OLT 1577T/1270R 40 C++ 9.95T/9.95R-2.4T/1.2R SC I-Temp