

GPONOLT-SFP-C+-I

GPON OLT 20km Tx1490/Rx1310nm SC/UPC | Tx2.5G/Rx1.25G C+ I-Temp

1. Product overview

Application: ITU-T G.984.2 GPON OLT C+
Form Factor: SFP with SC/UPC receptacle
Transmission:
Tx: 2.488 Gbps @ 1490 nm (DFB LD, continuous mode)
Rx: 1.244 Gbps @ 1310 nm (APD-TIA, burst mode)
Distance: 30 km (single fiber, BiDi)
Temperature Range:
Commercial: 0°C to +70°C (CLGPONOLTC+)
Industrial: -40°C to +85°C (CLGPONOLTCL+I)
Power Supply: Single +3.3 V
Compliance: RoHS6, SFF-8472 digital diagnostics

2. Key features

Integrated Digital Diagnostic Monitoring (DDM)
Receiver RESET, Signal Detect, RSSI functions
Power consumption = 1.5 W
Optimized for long-reach GPON OLT applications (C+ class)

3. Applications

PON access networks; OLT-side deployment.

4. Technical data

Technical specifications	Continued (read down each column)
Data Input Swing (Tx): 200-2000 mVpp differential	Impedance: 100 O differential
Data Output Swing (Rx): 400-1600 mVpp differential	LVTTTL Logic: Compatible for control signals (TX_DIS, RX_SD, RSSI, etc.)

5. Recommended operating conditions

Storage Temp: -40 to +85°C
Operating Temp: 0-70°C (C-temp) / -40-85°C (I-temp)
Supply Voltage: 3.15-3.45 V
Max Supply Current: 500 mA

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6. Optical characteristics

Optical specifications	Continued (read down each column)
Transmitter (1490 nm, 2.488 Gbps):	Dispersion Penalty: = 1 dB
Central Wavelength: 1480-1550 nm (typ. 1490 nm)	Receiver (1310 nm, 1.244 Gbps, burst mode):
Spectral Width (-20 dB): = 1 nm	Wavelength Range: 1290-1330 nm
SMSR: = 30 dB	Sensitivity: = -30 dBm (BER < 10 ⁻¹⁰)
Output Power: +3 to +7 dBm	Overload: = -12 dBm
Extinction Ratio: = 8.2 dB	Dynamic Range: 15 dB
Optical Return Loss Tolerance: -15 dB	Damage Threshold: +5 dBm

7. Digital diagnostics and management

Monitors: Temperature, Voltage, Bias Current, Tx Power, Rx Power
Alarm & Warning thresholds stored in EEPROM
Supports I2C (2-wire) interface
Calibration: Internal, average power measurement
Teknisk info

8. Safety and regulatory

Application: ITU-T G.984.2 GPON OLT C+
Compliance: RoHS6, SFF-8472 digital diagnostics

9. Ordering information

GLOBALfiber part number	Product description
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