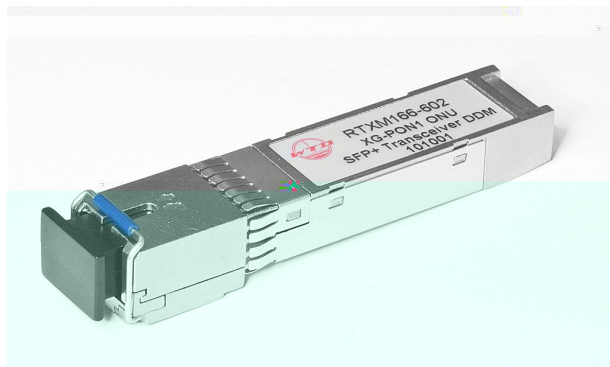


XG-PON1 ONU Optical Transceiver SFP+ Module



The XG-PON1 ONU Transceiver is designed for XG-PON1 transmission. The module incorporates 2.48832Gb/s 1270nm burst-mode transmitter and 9.95328Gb/s 1577nm continuous-mode receiver. An integrated WDM coupler can separate 1270nm input light and 1577nm output light. The metallic package guarantees excellent EMI and EMC characteristics, which totally comply with international relevant standards.

Specifications

(tested under recommended operating conditions, unless otherwise noted)

| Parameter | Symbol | Unit | Value | | |
|--------------------------------------|-----------------|------|-------|---------|------|
| | | | Min | typical | Max |
| Electrical Characteristics | | | | | |
| Power Consumption | | W | - | - | 1.5 |
| LVPECL Single Ended Data Input Swing | | mV | 100 | - | 800 |
| CML Single Ended Data Output Swing | | mV | 300 | | 500 |
| Differential Data input impedance | | | - | 100 | - |
| Signal Level(LVTTL) | VOH | V | 2.4 | - | Vcc |
| | VOL | V | 0 | - | 0.8 |
| Optical transmitter Characteristics | | | | | |
| Data Rate | | Mbps | -- | 2488.32 | - |
| Center Wavelength Range | λ_c | nm | 1260 | - | 1280 |
| Spectral Width(@-20dB) | $\Delta\lambda$ | nm | - | - | 1 |

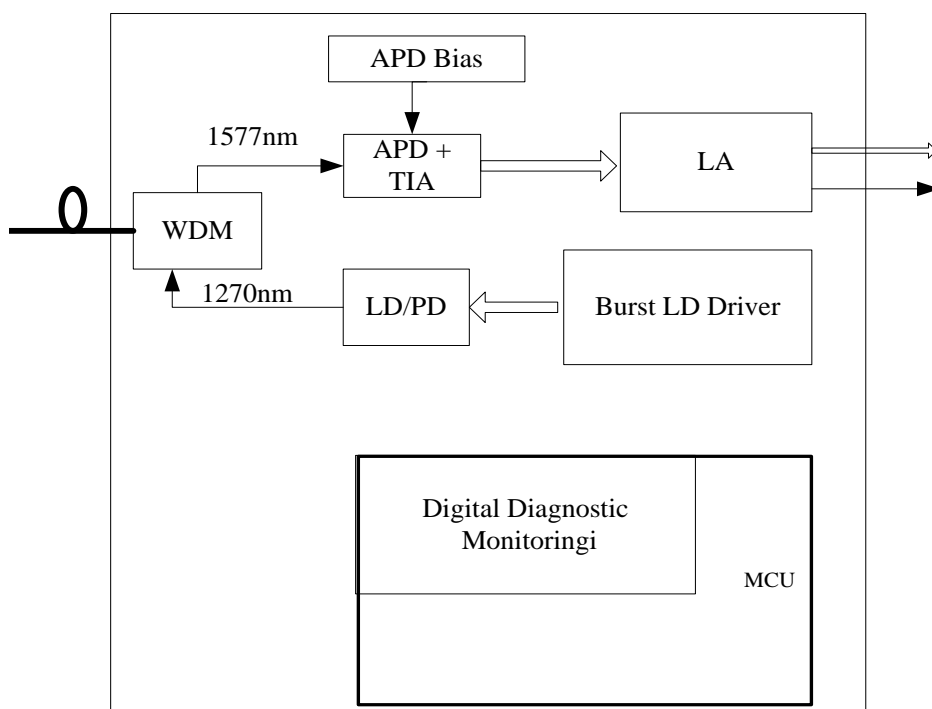
XG-PON1 ONU Optical Transceiver SFP+ Module

Absolute Maximum Ratings

| Parameter | Symbol | Unit | Min | Max |
|---------------------------|--------|------|-----|-----|
| Storage Temperature Range | | | | |

Recommended Operating Conditions

Principle diagram

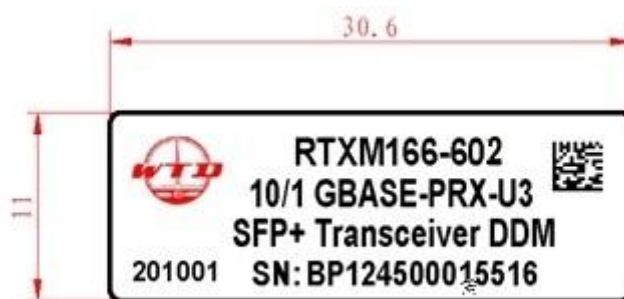
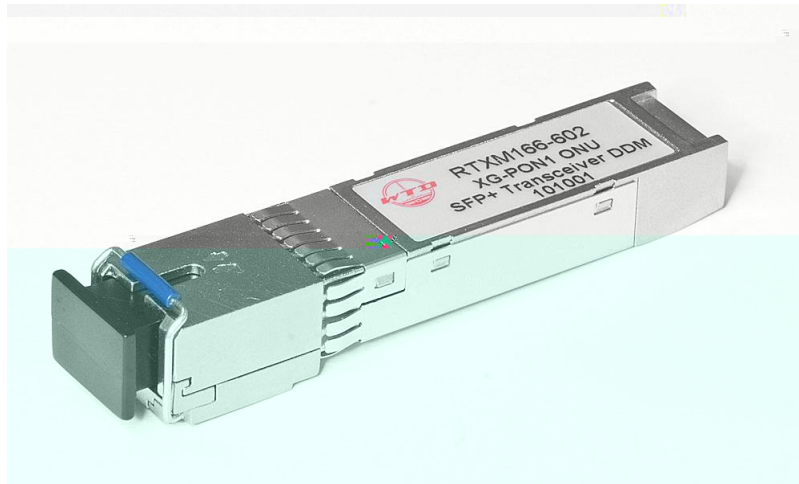


Optic Ports Definition

Single SC receptacle optical interface

XG-PON1 ONU Optical Transceiver SFP+ Module

Product appearance and Label



Regulatory Compliance

| Feature | Test Method | Performance |
|--|--|--|
| Electrostatic Discharge (ESD) to the Electrical Pins | MIL-STD-883E Method 3015.7 | Class 1 (>1.5kV) Human Body Model |
| Electrostatic Discharge (ESD) Immunity | IEC61000-4-2 | LV4(Air discharge 15kV, Contact discharge 8kV) Performance criterion B |
| Electromagnetic Interference (EMI) | CISPR22 ITE Class B EN55022 Class B | Compliant with standards |
| Immunity | IEC61000-4-3 Class 2 EN55024 | Typically show no measurable effect from a 3V/m field swept from 80 to 1000MHz applied to the transceiver without a chassis enclosure. |
| Eye Safety | FDA 21 CFR 1040.10 and 1040.11 UL TUV EN 60825-1 | Compliant with Class 1 laser product |

XG-PON1 ONU Optical Transceiver SFP+ Module

Update Information