

# XG PON Optical Module



## NT-XGPON-A



NT-XGPON-A is designed for single mode fiber and operates at wavelength of 1270nm. The transceiver module uses a DFB laser diode and fully compliant with IEC60825 and CDRH class 1 eye safety. It contains APC functions, a temperature compensation circuit to ensure compliance with ITU-T G987.2 requirements at

operating temperature. The receiver section uses a hermetic packaged APD-TIA (APD with trans-impedance amplifier) and a limiting amplifier. The APD converts optical power into electrical current and the current is transformed to voltage by the trans-impedance amplifier. The differential DATA and /DATA CML data signals are produced by the limiting amplifier. The APD-TIA is AC coupled to the limiting amplifier through a low pass filter.

#### Product Features

- ✓ Single Fiber XG-PON ONU Transceiver
  1270nm burst-mode 2.48832 Gb/s transmitter with
  DFB laser
  1577nm continuous-mode 9.95328Gb/s APD/TIA
  receiver
- ✓ Digital diagnostic monitoring (DDM)with internal calibration
- ✓ SFP+ package with SC APC receptacle connector
- ←3.3V separated power supply, Low power dissipation
- ✓ LVPECL interface logic level for data input
- ✓ CML interface logic level for data output
- ✓ LVTTL for burst signal input
- ✓ LVTTL for receiver loss of signal indication

- ✓ Compliant with ITU-T G.987.2
- ✓ SFP+ MSA SFF-8431 compliant
- ✓ SFF-8472 compliant
- ✓ Telcordia GR-468-CORE and MIL-STD-883 compliant
- ✓ RoHS-6/6 Compliant
- ✓ Operating temperature range: -40°C ~ + 85°C
- ✓ IEC 60825-1 Compliant
- ✓ FCC Part 15 Class B /EN55022 Class B (CISPR 22B)/ VCCI Class B Compliant

## **Applications**

✓ 10-Gigabit-capable passive optical networks (XG-PON) ONU



# NT-XGSPON-S



NT-XGSPON-S is is designed for single mode fiber and operates at wavelength of 1270nm. The transceiver module uses a DFB laser diode and fully compliant with IEC60825 and CDRH class 1 eye safety. It contains APC functions, a temperature compensation circuit to ensure compliance with ITU-T G987.2 requirements at

operating temperature. The receiver section uses a hermetic packaged APD-TIA (APD with trans-impedance amplifier) and a limiting amplifier. The APD converts optical power into electrical current and the current is transformed to voltage by the trans-impedance amplifier. The differential DATA and /DATA CML data signals are produced by the limiting amplifier. The APD-TIA is AC coupled to the limiting amplifier through a low pass filter.

## **Product Features**

- ✓ Single Fiber XG-PON ONU Transceiver
  1270nm burst-mode 2.48832 Gb/s transmitter with
  DFB laser
  1577nm continuous-mode 9.95328Gb/s APD/TIA
  receiver
- ✓ Digital diagnostic monitoring (DDM)with internal calibration
- ✓ SFP+ package with SC APC receptacle connector
- ←3.3V separated power supply , Low power dissipation
- ✓ LVPECL interface logic level for data input
- ✓ CML interface logic level for data output
- ✓ LVTTL for burst signal input
- ✓ LVTTL for receiver loss of signal indication

- ✓ Compliant with ITU-T G.987.2
- ✓ SFP+ MSA SFF-8431 compliant
- ✓ SFF-8472 compliant
- ✓ Telcordia GR-468-CORE and MIL-STD-883 compliant
- ✓ RoHS-6/6 Compliant
- ✓ Operating temperature range:  $-40^{\circ}$ C ~ + 85 $^{\circ}$ C
- ✓ IEC 60825-1 Compliant
- ✓ FCC Part 15 Class B /EN55022 Class B (CISPR 22B)/ VCCI Class B Compliant

# **Applications**

 ✓ 10-Gigabit-capable passive optical networks (XG-PON) ONU