

10G EPON Optical Module

NT-10GEPON-S



NT-10GEPON-S 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 IEEE 802.3av 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 10G symmetrical EPON ONU Transceiver
- 1270nm burst-mode 10.3125 Gb/s transmitter with DFB laser
- 1577nm continuous-mode 10.3125Gb/s APD/TIA receiver
- ✓ Digital diagnostic monitoring (DDM) with internal calibration
- ✓ SFP+ package with SC/UPC receptacle connector
- ✓ +3.3V separated power supply, low power dissipation
- ✓ LVPECL interface logic level for data input
- ✓ CML interface logic level for data output
- ✓ LVTTTL for burst signal input
- ✓ LVTTTL for receiver loss of signal detect indication
- ✓ Compliant with IEEE 802.3av
- ✓ SFF-8472 compliant
- ✓ Telcordia GR-468-CORE and MIL-STD-883 compliant
- ✓ RoHS-6/6 compliant
- ✓ Operating temperature range: Commercial: 0°C ~70°C
- ✓ IEC 60825-1 compliant
- ✓ FCC Part 15 Class B / EN55022 Class B (CISPR 22B) / VCCI Class B compliant

Applications

- ✓ Symmetric 10GEPON PR30 ONU

NT-10GEAPON-A



NT-10GEAPON-A is designed for single mode fiber and operates at wavelength of 1310nm. 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 IEEE 802.3av 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 10G asymmetrical EPON ONU Transceiver
- 1310nm burst-mode 1.25 Gb/s transmitter with DFB laser
- 1577nm continuous-mode 10.3125Gb/s APD/TIA receiver
- ✓ Digital diagnostic monitoring (DDM)with internal calibration
- ✓ SFP+ package with SC/UPC 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 detect indication

- ✓ Compliant with IEEE 802.3av
- ✓ SFF-8472 compliant
- ✓ Telcordia GR-468-CORE and MIL-STD-883 compliant
- ✓ RoHS-6/6 compliant
- ✓ Operating temperature range: -40°C ~ +85°C
- ✓ FCC Part 15 Class B /EN55022 Class B (CISPR 22B)/ VCCI Class B compliant.

Applications

- ✓ Asymmetric 10GEAPON PRX30 ONU