XGSPON ONT LXE-050X-C

Platform Briefing

v1.0

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Overview

To deliver triple-play services to the subscriber in Fiber-to-the-Home or Fiber-to-the-Premises application, the XGSPON ONT LXE-050X-C for SFU (Single Family Unit) incorporates interoperability, key customers' specific requirements and cost-efficiency.

Equipped with ITU-T G.9807.1 XGS PON compliant 10G Downstream and 10G Upstream XGSPON interface, the LXE-050X-C ONT supports the full Triple Play of services including voice, video, and high speed internet access.

Compliant with standard OMCI definition, ONT LXE-050X-C is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.

Service

Data

The LXE-050X-C ONT is delivered with one 100M/1G/2.5G/5G/10G Base-T interface and four 1G/2.5G/5G/10G Base-T interfaces, supporting:

- Auto-negotiation and MDI/MDIX auto-sensing
- Built-in layer-2 switch
- Advanced data features such as VLAN tag manipulation, classification, and filtering

Video

The LXE-050X-C ONT supports video contents delivered in the form of data (by multicast or unicast).

In case where multicast technology is used for delivering video contents through data channel, the ONT supports the dedicated multicast GEM port on the Downstream. So the video contents are received and processed by all the ONTs through the unified channel and this greatly improves the bandwidth efficiency.

In addition, the ONT supports IGMP snooping function to be applied for further optimization. When IGMP snooping is enabled, the ONT monitors the member joining and leaving activities at the Ethernet service port, and then selectively delivers the multicast streams.

Interface

WAN: XGSPON/XGPON/10GEPON (switchable via webGUI), SC/APC

1 X 100M/1G/2.5G/5G/10GBase-T interface

4 x 100M/1Gbase-T interface

Specification

Dimensions

- 149mm x 114mm x 35mm (WxDxH)

Weight

- 0.310kg

Power Supply

- +12V (feed via external AC/DC adapter)
- 2-PIN power adaptor input
- Dying Gasp support
- Power consumption: ~ 7W

Working Environment

- Temperature: 0℃ ~ 45℃
- Humidity: 5% ~ 95% relative humidity

Safety & EMI

- CE compliant
- FCC/UL compliant

Environmental Index

- RoHS6

Installation

- Desktop mounting & wall mounting

XGSPON Interface

Compliant with ITU-T G.9807.1 XGS PON standards

- SFF type laser, SC/APC connector
- BoSA on board optical solution
- 9.953 Gbps Burst Mode Upstream Transmitter
- 9.953 Gbps Downstream Receiver
- G.9807.1 XGS PON standards compliant: 4 dBm~ 9 dBm launch power; -28 dBm ~ -9 dBm for receiving
- Wavelengths:
  - 1260 nm–1280 nm US, 1575 nm–1580 nm DS
- G.9807.1-compliant 10 GPON Encapsulation Method (XGEM) framing
- Multiple XGEM Ports per device
- Flexible mapping between XGEM Ports and T-CONT
- Activation with automatic discovered SN and password in conformance with ITU-T G.9807.1
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction) in both directions

LED

- POWER
- PON
- INFO
- 10G LAN
- LAN1
- LAN2
- LAN3
- LAN4

Ethernet Interface

- 100M/1G/2.5G/5G/10G Base-T interface with RJ-45 connector
- 100M/1Gbase-T interfaces with RJ45 connectors
- Ethernet port auto-negotiation or manual configuration
- MDI/MDIX automatically sense
- Hardware priority queues on the downstream direction in support of CoS
- 802.1D bridging
- Virtual switch based on 802.1q VLAN
- VLAN tagging/detagging per Ethernet port
- VLAN stacking (Q-in-Q) and VLAN Translation
- IP ToS/DSCP to 802.1p mapping
- IGMP v2/v3 snooping

OAM

- Standard compliant OMCI (the embedded operations channel) interface as defined by ITU-T G.9807.1 and ITU-T G.988
- Alarming and performance monitoring
- Remotely software image download over OMCI, as well as activation and rebooting
- Hold two software sets with software image integrity checking and automatic rollback

Interoperability with OLTs

- Alcatel – Lucent / Nokia ISAM7360
- Huawei
- ZTE
- AlticeLabs
- Adtran

Enclosure

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