XGS-PON ONT XG-99C

Product Datasheet

VERSION 2.0

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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 XGS-PON SFU (Single Family Unit) XG-99C incorporates interoperability, key customers' specific requirements and cost-efficiency.

Equipped with ITU-T G.9807.1 compliant 10G Downstream and 10G Upstream XGS-PON interface, XG-99C supports the full Triple Play of services including voice, video, and high speed internet access service.

Compliant with standard OMCI definition, XG-99C is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.

■ Service

Data

The XG-99C ONT is delivered with one 10G Base-T, and one 10/100/1000 Base-T Ethernet data 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 XG-99C ONT supports delivered in 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 XGEM 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

Product	10G Base-T	10/100/1000 Base-T Interface
XG-99C1	1	0
XG-99C2	1	1

■ Specification

Dimensions

- 215mm*110mm*40mm(H*W*D) (with bracket)
- 150mm*110mm*30mm(H*W*D) (without bracket)

Power Supply

- +12V (feed via external AC/DC adapter)
- 2-PIN power adaptor input
- Dying Gasp support
- Power switch
- Power Consumption: less than 10W

Working Environment

- Temperature: -5°C ~ 45°C
- Humidity: 20% ~ 80% relative humidity

Safety & EMI

- FCC/ETL compliant
- CE compliant

Installation

- Desktop mounting (without braket)
- Vertical mounting and wall mounting

PON Interface

- Compliant with ITU-T G.9807.1 XGS-PON standards
- On-board optics
- 10 Gbps Burst Mode Upstream Transmitter
- 10 Gbps Downstream Receiver
- Compliant with ITU-T G.9807 Class N1
  - +4dBm ~+9dBm launch power, -28dBm sensitivity, and -9dBm overload
- Wavelengths:
  - US 1260nm to 1280nm, DS 1575nm to 1580nm

PON QoS

- Multiple T-CONTs per device
- Multiple XGEM Ports per device

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3

- 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

- DBA reporting

- 802.1p mapper service profile on U/S

- Mapping of XGEM Ports into a T-CONT with priority queues based scheduling

- Support Multicast XGEM port and incidental broadcast XGEM port.

Ethernet Interface

- 10GBase-T interface with RJ-45 connectors, compatible with 5GBase-T, 2.5GBase-T and 1GBase-T

- Optional 10/100/1000Base-T interface with RJ-45 connector

- 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

- VLAN tagging/detagging per Ethernet port

- VLAN stacking (Q-in-Q) and VLAN Translation

- IP ToS/DSCP to 802.1p mapping

- Class of Service based on UNI, VLAN-ID, 802.1p bit, and combination

- Marking/remarking of 802.1p

OAM

- Standard compliant OMCI (the embedded operations channel) interface as defined by ITU-T G.988

- Alarming and AVC report, 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

■ Contact Information

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