GL-G8004U-V5 GPON ONT
Datasheet

Overview

To deliver triple-play services to the subscriber in Fiber-to-the-Home or Fiber-to-the-Premises application, the GL-G8004U-V5 GPON ONT incorporates interoperability, key customers' specific requirements and cost-efficiency.

Equipped with ITU-T G.984 compliant 2.5G Downstream and 1.25G Upstream GPON interface, the GPON ONT supports the full of services including voice, video, and high speed internet access.

Compliant with standard OMCI definition, GL-G8004U-V5 GPON ONT is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.

Service

■ **Data**

The GL-G8004U-V5 ONT is delivered with 4 10/100/1000 Base-T interface, supporting:

- Auto-negotiation and MDI/MDIX auto-sensing

- Built-in layer-2 switch

- Advanced data features such as VLAN tag manipulation, classification, and filtering

- Built-in layer-3 routing and residential gateway

- 2.4GHz 300Mbps + 5GHz 867Mbps WLAN interface

- USB 2.0 storage

■ <u>Video</u>

The GL-G8004U-V5 ONT supports video contents delivered in the form of data (by multicast or unicast).

■ <u>Voice</u>

The GL-G8004U-V5 ONT can optionally be delivered with two POTS interface port for carrier-grade voice services,

supporting:

- Multiple voice codec

- Echo Cancelling, VAD, CNG

- Supporting static or dynamic jitter buffer

- Various CLASS services - Caller ID, Call Waiting, Call Forwarding, Call Transfer, etc. SIP (RFC3261)

- MEGACO v2 (H.248)

To enable VoIP access, the GL-G8004U-V5 ONT also supports interfacing external IAD box or Home Router with voice capability through the Ethernet Interface.

Specification

Optical SPEC	Working wavelength	nm	PON：TX1310，RX1490;
	The light emitting power	dBm	1 ~ +4(GPON)
	The light receiving sensitivity	dBm	≥ -27
	Optical fiber connector	/	PON：SC/UPC (Optional SC/APC)
Port	The user side Ethernet ports	/	4GE
	USB	/	2
	POTS	/	2
WiFi	2.4G WiFi	/	300Mbps
	5G WiFi	/	867Mbps
Keys	RESET	/	1
	WPS	/	1
Other	The power supply	V/A	AV110 ~ 255V→DC12V 1.5A
	Work temperature	℃	-5 ~ 45

WiFi

- 2.4G 300Mbps+5G 867Mbps

- 802.11 b/g/n/ac

- Internal Antenna

Power Supply

- +12V / 1.5A (feed via external AC/DC adapter)

- 2-PIN power adaptor input

- Dying Gasp support

- Power switch

- Power Consumption: less than 12W

GPON Interface

- Compliant with ITU-T G.984 GPON standards

- BoSA on board optical solution

- 1.244 Gbps Burst Mode Upstream Transmitter

- 2.488 Gbps Downstream Receiver

- Compliant with ITU-T G.984.2 Amd1, Class B+

- Wavelengths: US 1310nm, DS 1490nm

- Multiple T-CONTs per device

- Multiple GEM Ports per device

- Flexible mapping between GEM Ports and T-CONT

- Activation with automatic discovered SN and password in conformance with

  ITU-T G.984.3

- AES-128 Decryption with key generation and switching

- FEC (Forward Error Correction) in both directions

- DBA reporting by piggyback reports in the DBRu (mode 0 and mode 1)

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

- Support Multicast GEM port and incidental broadcast GEM port.

Ethernet Interface

- 4GE

- Ethernet port auto negotiation or manual configuration

- MDI/MDIX automatically sense

- Virtual switch based on 802.1Q VLAN

- VLAN tagging/detagging per Ethernet port

OAM

- Standard compliant OMCI (the embedded operations channel) interface as defined
  by 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

Application