WGP3200-S Series GPON ONU

1.Product Overview

WGP3200-S series ONU is a triple-play GPON terminal product designed for FTTH multi-service accessing requirements by telecommunication, broadcasting and TV operators. Based on mature, stable and cost-effective GPON technology, it is characterized with high bandwidth, high reliability, easy management, favorable QoS guarantee, etc.

WGP3200-S ONU supports fiber accessing based on GPON technology. It has 1 EPON port uplink, 4 Ethernet ports at user side.

GPON technology, based on ITU-T G.984x series standards, is the latest PON accessing method. With high bandwidth, high efficiency, large coverage, and rich user ports, it is ideal for operators to achieve comprehensive transformation.

WGP3200-S can be used cooperatively with GPON OLT, EMS network management system to provide a complete accessing solution of multiple services like broadband, voice and video service.

2.Performance Features

➢ Single fiber accessing.
➢ Fully compatible with ITU-T G.984 standard; adopt GPON upstream and downstream.
➢ Support 1 GE+3 FE auto-adapting Ethernet ports.
➢ Support OMCI/TR069 management.
➢ Support Ethernet auto-negotiation and MDI/MDIX auto-detection.
➢ Support loopback detection at user network interface.

✧ Data Service

➢ Support Ethernet interface rate, working mode and Pause flow control configuration.
➢ Support packet filtering and anti-illegal message protection, forbidding unknown unicast, broadcast and multicast message.
➢ Support performance statistics of Ethernet lines.
➢ Support 4KVLAN, VLAN tagged label processing, traffic classification and packet filtering,
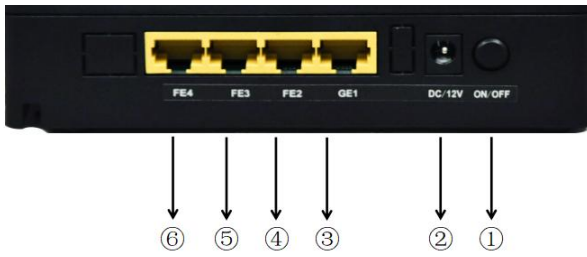
STP/RSTP etc.
- ➢ Support DHCP.
- ➢ Support PPPoE.
- ➢ Support multicast and IGMP Snooping.
- ➢ Support QoS.
- ➢ Support AES-128 decryption, key generation and switch.
- ➢ Support dual management based on DBA and priority to meet the minimum specified bandwidth needs for users.

3.Product Specification

Item	Specification
Interface	
PON Interface	1*GPON port compliant with FSAN G.984.2 standard
	Downstream data rate: 2.488Gbps;
	Upstream data rate: 1. 244Gbps
	SC/PC single-mode single fiber
	Support 28dB link (FSAN Class B+)
	1:128 splitting
Ethernet Interface	1GE +3 FE auto-negotiation Ethernet ports
	Full/half duplex mode
	RJ45 electrical port, support auto MDI/MDI-X;
	Transmission distance 100m
Power Interface	+12V DC power supply port
Performance Parameter	
PON Optical Port Parameter	Wavelength: Tx 1310nm, Rx 1490nm
	Tx optical power: 0.5～5dBm
	Rx sensitivity: -28dBm
	Saturation optical power: -8dBm
Data Transmission Parameter	Throughput: downstream >980Mbps; upstream >950Mbps
	Ethernet port: 1000Mbps or 100Mbps
	Packet Loss Ratio: <1*10E-12
	Latency: <1.5ms
Device Management	
Management Mode	Support OMCI protocol based on G.984.4
	Support TR069 remote management and remote update
	Support local WEB/CLI management
Function Management	Status monitor, configuration management, alarm management, log management
Physical Feature	
Housing	Plastic housing
Power Supply & Power	External 12VDC/1A power supply adapter

Consumption	Power consumption: < 4.3W
Dimension& Weight	Product dimension: 150mm(L) x120mm(W) x 38mm (H)
	Product weight: 0.27kg.
Environmental Specifications	Operating temperature: 0 to 45℃;
	Storage temperature: -40 to 85 ℃
	Operating humidity: 10% to 90% (Non-condensing)
	Storage humidity: 5% to 95% (Non-condensing)

4. Port Description

①	Power on/off button
②	12V DC power input
③	Ethernet port 1
④	Ethernet port 2
⑤	Ethernet port 3
⑥	Ethernet port 4

5. Indicators Description

Function	Identifier	Status	Definition
Ethernet	GE、FE	On	Ethernet port is connected.
		Flashing	Ethernet data is transmitting.
		Off	Ethernet port is disabled.
Internet	ETH	On	WAN accessed Internet.
		Flashing	data is transmitting.
LOS	SYS	Slow flashing	Optical receiving power is too low.
		Off	Optical receiving power is normal.
PON	PON	On	The ONT connection is normal.
		Flashing	The ONT is creating connection.
		Off	No optical signal input or optical receiving power is too low.
Power	PWR	On	Power on
		Off	Power off

6. ONU Common Fault Diagnosis

Phenomenon	Simple Troubleshooting
All the indicators are off after the power is turned on.	Please check if the power adapter is incorrect.
	Please check if the outlet has power.
	The ONU terminal hardware may be broken.
The LOS indicator is on or flashing.	Check if the fiber is rightly connected.
	Check if the ONU lost optical parameters.
192.168.1.1 ping block	Please check if the NIC is disabled.
	Please check if the NIC's address is correct (should be on the same network segment).
Fail to register on the OLT	First check if the line optical attenuating is normal in the "Status" - "Network information" page (see figure 5-1).
	Loid error, wrong input or no such LOID on the OLT.
	Whether the fiber is connected to the wrong PON port.
Fail to access the Internet after successful registration	Log in to the WEB to check "Status" - "Network information" page. Whether the IP address of the INTERNET is obtained and the VLAN of the Internet on the OLT is correct (see figure 5-2).
	If the IP address is not obtained, check the dialing status (see figure 5-3).	The error "691" indicates the account or password is incorrect.
		The error "678" indicates that the channel is unreachable.
Unable to access the Internet after connecting the router	Check if the router address is 192.168.1.1. If so, please change it to 192.168.3.1.
	Check whether the port is connected incorrectly. The network cable should be connected WAN port on the router.
	Check the configuration of the router is correct. Generally, the IP address is obtained by DHCP. If the optical modem is configured as a bridge, the router needs to obtain the address in pppoe mode.