

FD600-612XI-HZ220 GPON ONT



Overview

FD600-612XI-HZ220 GPON HGU ONT is one of the GPON optical network unit design to meet the requirement of the broadband access network. It apply in FTTH/FTTO to provide the data, voice and video service based on the GPON network.

GPON is the latest generations of access network technology. ITU-T G.984 is the standard protocol of GPON. The GPON standard differs from other PON standards in that it achieves higher bandwidth and higher efficiency using larger, variable-length packets. GPON offers efficient packaging of user traffic, with frame segmentation allowing higher quality of service (QOS) for delay-sensitive voice and video communications traffic. GPON networks provides the reliability and performance expected for business services and provides an attractive way to deliver residential services. GPON enables Fiber To The Home (FTTH) deployments economically resulting to accelerated growth worldwide.

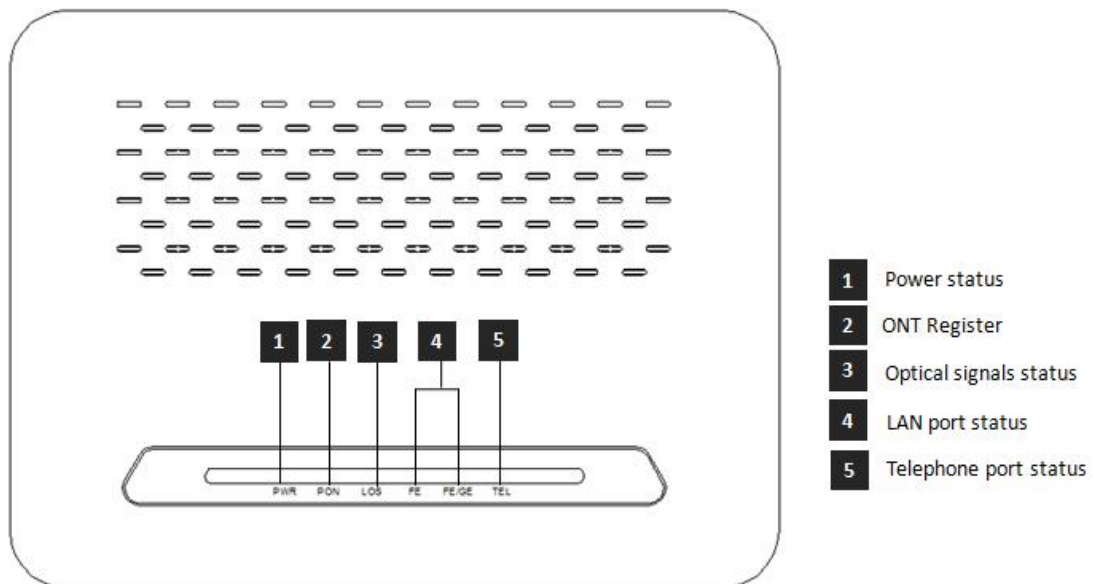
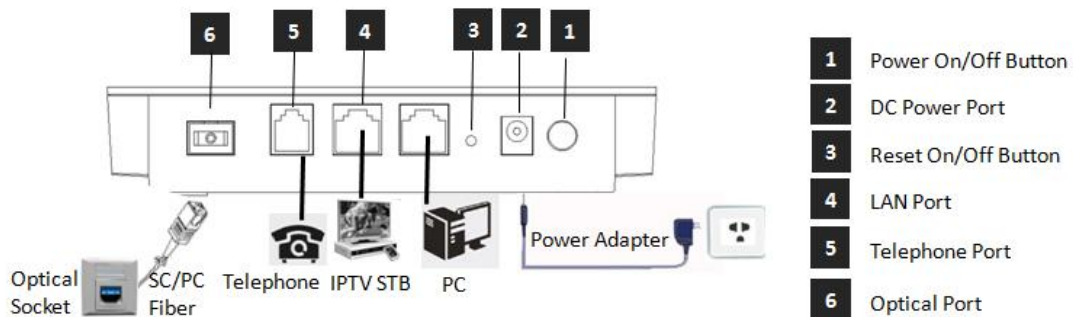
FD600-612XI-HZ220 provide one POTS ports, one FE and one GE auto-adapting Ethernet ports. The FD600-612XI-HZ220 features high-performance forwarding capabilities to ensure excellent experience with VoIP, Internet and HD video services. Therefore, the FD600-612XI-HZ220 provides a perfect terminal solution and future-oriented service supporting capabilities for FTTH deployment. It has good third-party compatibility to work with the third party OLT, such as Huawei/ZTE/Fiberhome/Alcatel-Lucen.

Features

- Full compatible with ITU-T G.984
- Support one POTS
- Support one FE and one GE auto-adapting Ethernet ports
- Support OMCI and TR069 for remote management
- Support three router function
- Support Web for local management
- Support Auto-negotiation and MDI/MDIX

- Support the Ethernet interface rate, working mode and flows control
- Support loopback at UNI
- Support packet filtering and anti-illegal message attack protection
- Support performance statistics of Ethernet lines
- Support VLAN tagged label processing, traffic classification and packet filtering, STP/RSTP etc.
- Support DHCP Option60 reporting the location information of the Ethernet interface
- Support PPPoE+ for accurate subscribers identification
- Support H.248、MGCP and SIP protocol
- Support IGMP Snooping
- Support AES-128

Product interface and LED definitions



Indicator			Description
1	PWR	Power status	On: The ONT is power on; Off: The ONT is Power off;
2	PON	ONT Register	On: Success to register to OLT; Blinking: In process of registering to OLT; Off: In process of registering to OLT;

3	LOS	GPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
4	FE/GE	LAN port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
5	TEL	Telephone port status	On : The connection between the TEL port and the voice server has been set up Blinking : The voice service of the TEL port is established; Off : The connection between the TEL port and the voice server is not set up.


Specification

Item	Parameters	Specification
Interface	PON Port	1*GPON port, FSAN G.984.2 standard, Class B+ Downstream Data Rate: 2.488Gbps Upstream Data Rate: 1.244Gbps SC/PC single mode fiber 28dB Link loss and 20KM distance with 1:128
	Ethernet Port(LAN)	1*FE and 1*FE/GE Auto-negotiation RJ45 ports Full Duplex / Half-Duplex RJ45, Auto-MDI/MDI-X Transmission Distance 100 Meter
	POTS Port	1*RJ11 with 3REN Max 1km distance Balanced Ring, 50V RMS
	Power Supply Port	12V DC input
	PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0.5~5dBm Rx Sensitivity: -27dBm Saturation Optical Power: -8dBm Connector Type: SC Optical Fiber: 9/125µm single-mode fiber
	Data Transmission Parameter	PON Throughput: Downstream 2.488Gbit/s ; Upstream 1.244Gbit/s Ethernet: 100Mbps or 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Management	Network Management	Standard compliant OMCI interface as defined by ITU-T G.984.4 Support TR069 and WEB management

	Management Function	Status monitor, Configuration management, Alarm management, Log management
Environmental Specifications	Shell	Plastic casing
	Power	External 12V 1A DC power supply adapter Power consumption: <6W
	Dimensions	160mm(L) x 120mm(W) x33mm (H) 0.2kg
	Environment	Operating Temperature: 0~50℃ Storage Temperature: -40~85℃ Operating Humidity: 10%~90%(Non-condensing) Storage Humidity: 10%~90%(Non-condensing)

Application

- ◇ Solution: FTTH
- ◇ Business: Broadband Internet、Voice、IPTV

Network Construction



Figure: FD612H Application Diagram

Ordering information

Product Name	Product Model	Descriptions
HGU Type GPON ONT	FD600-612XI-HZ220	1*GE and 1*FE Ethernet interface, 1*POTS interface, 1 GPON interface, plastic casing, external power supply adapter