

FD600-804GAWDU-HZ400 Single Fiber GPON ONT



Brief Views

FD600-804GAWDU-HZ400 is fiber to the home multi service access GPON ONT. It's based on the mature, stable, high cost performance GPON technology and has gigabit Ethernet switching, WDM and HFC technology. FD600-804GAWDU-HZ400 has a higher bandwidth, higher reliability, easy management and good quality of service (QoS) guarantee with technical performance of equipment meet the ITU G. 984 requirements and have good compatibility with third party manufacturers OLT.

It adopts single fiber WDM technology with downlink wavelength 1490nm and 1550nm, uplink wavelength 1310nm .It only needs one-core fiber to transmit data service.

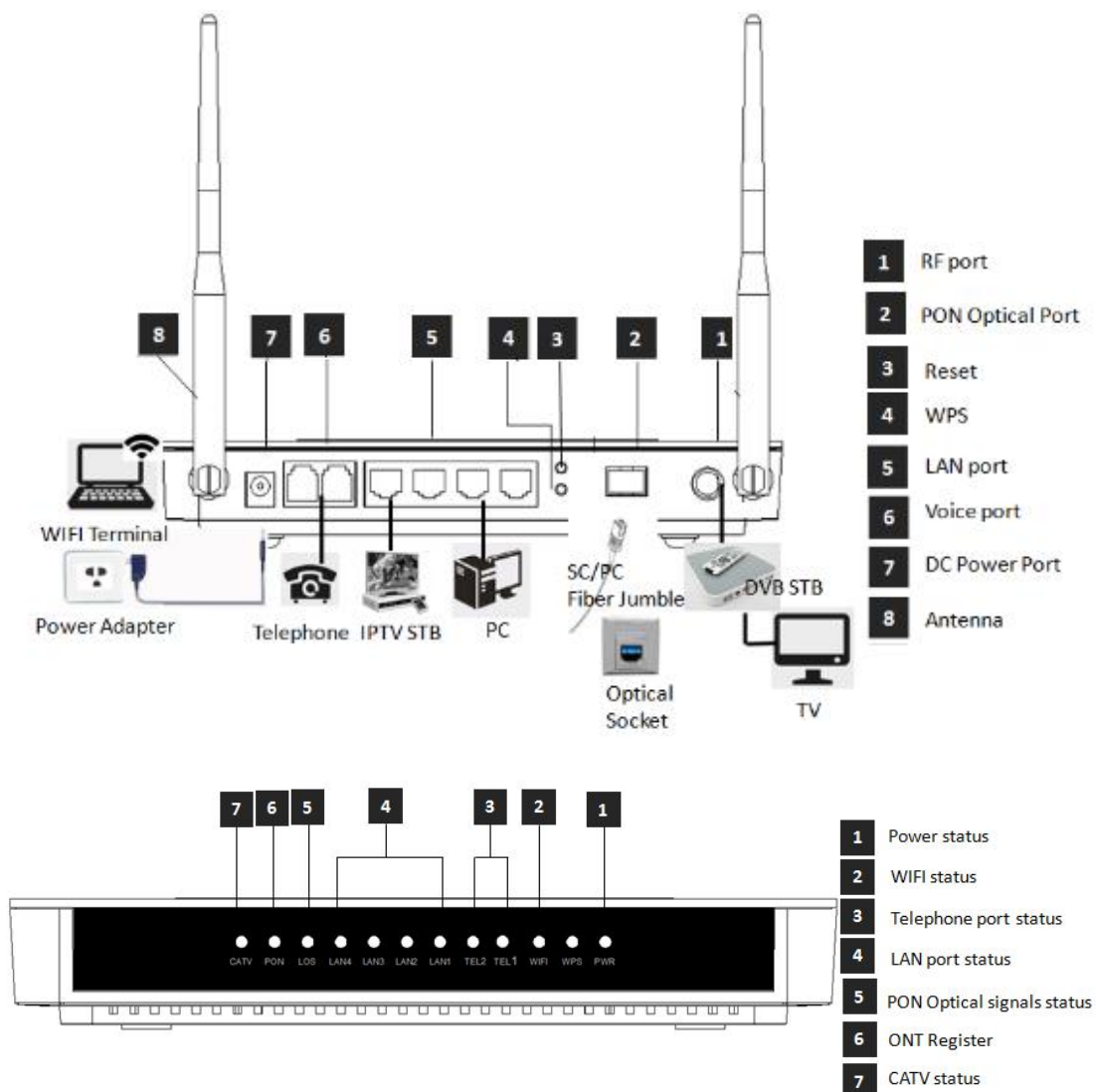
ONT FD600-804GAWDU-HZ400 provides 1 PON port , 2 POTS port, 4 10/100/1000M Ethernet adaptive ports, one USB port, one CATV RF output, support double frequency Wi-Fi function.

Functional Feature

- Full compatible with ITU-T G.984
- Support two POTS
- Support four GE auto-adapting Ethernet ports
- Support 802.11a/b/g/n/ac Wi-Fi access, while support 2.4GHz and 5GHz
- Support one CATV output
- Support one USB interface
- Support OMCI and TR069 for remote management

- Support Auto-negotiation and MDI/MDIX
- Support the Ethernet interface rate, working mode and flows control configuration
- Support loopback at UNI
- Support packet filtering and illegal message attack protection
- Support performance statistics of Ethernet link
- 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 and SIP protocol
- Support IGMP Snooping
- Support AES-128
- Support Dynamic Bandwidth Allocation (DBA)

Product interface and LED definitions



Indicator			Description
1	PWR	Power status	On: The ONU is power on Off: The ONU is Power off
2	WIFI	WIFI	Blinking : Data is being transmitted On : Wi-Fi function Opens
3	TEL1-2	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.
4	LAN1-4	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	LOS	GPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
6	PON	ONT Register	On: Success to register to OLT Blinking: In process of registering to OLT Off: Failed to register to OLT;
7	CATV	CATV status	On : CATV optical normal Off : The CATV signals are not received

Specification

Item		Parameter
Interface	Uplink Interface	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
	CATV Interface	1 RF output F-Type Connector
	POTS Port	2*RJ11 with 3REN Max 1km distance Balanced Ring, 50V RMS
	Ethernet Interface	4*10/100/1000M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
	USB interface	1*USB 2.0 interface Transmission Rate: 480Mbps
	Power Interface	12V DC Power supply
Performance	PON	Wavelength: Tx 1310nm, Rx1490nm

Parameters	Optical Parameter	Tx Optical Power: 0.5~5dBm Rx Sensitivity: -28dBm Saturation Optical Power: -8dBm Connector Type: SC Optical Fiber: 9/125µm single-mode fiber
	Data Transmission Parameter	PON Throughput: Downstream 2.488Gbit/s s; Upstream 1.244Gbit/s Ethernet: 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
	Business Capability	Layer 2 wire speed switching Support VLAN TAG/UNTAG, VLAN translation Support Port-based speed limitation Support Priority classification Support storm control of broadcast Support link detection
Network Management	Management Mode	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
Physical Features	Shell	Plastic casing
	Power	External 12VDC/1A power supply adapter Power consumption: <7W
	Dimension and Weight	Item Dimension: 170mm(L) x 130mm(W) x 30mm (H) Item weight: 0.3kg
	Environmental Specifications	Operating temperature: 0 to 50°C Storage temperature: -40 to 85°C Operating humidity: 10% to 90%(Non-condensing) Storage humidity: 10% to 90%(Non-condensing)

WIFI Features

- Comply with IEEE802.11a/b/g/n/ac protocol standard, support 2.4GHz and 5GHz
- Fully compatible with IEEE 802.11n and improved in performance
- Physical layer protocol data rates up to 1Gbps
- Along with 802.11n MIMO (Multiple-Input Multiple-Output) technology, support up to 8 MIMO
- Support wider RF bandwidth, up to 160MHz
- Support higher 256-QAM modulation mode
- Support MIMO-OFDM encoding mode
- Support wireless security of 64/128 bit WEP、802.1x、WPA and WPA2



Item	Parameter
Wavelength	1550nm
Optical return loss	>45dB
Input optical power	-18dBm~0dBm
RF frequency	47MHz~1000MHz
RF output lever	≥78dBuV (@-12~-2dBm@85MHz)
AGC control accuracy	<± 1db
Flatness	<± 1.5db
CNR	>41dB (@-10dBm@DS22 Channel)
CSO	>60dBc (@-10dBm@DS22 Channel)
CTB	>60dBc (@-10dBm@DS22 Channel)
RF output return loss	>14dB
RF impedance	75Ω
AGC function	Support

Network Application

Typical Solution: FTTH, FTTO

Typical Business: Internet, IPTV, CATV, Voice, VOD, Camera, Wi-Fi

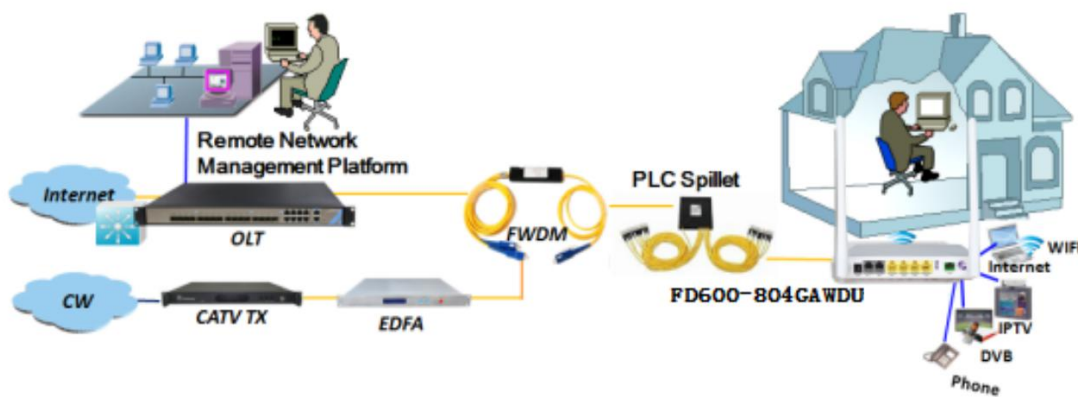


Figure: FD600-804GAWDU-HZ400 Application Diagram

Ordering information

Product Name	Product Model	Descriptions
GPON HGU	FD600-804GAWDU-HZ400	4*10/100/1000M Ethernet interface, 1 GPON interface, 2 POTS interface, 1 USB interface, 1 RF interface, built-in FWDM, Input optical power -18dBm ~ 0dBm, support AGC function, support Double Frequency Wi-Fi function, Plastic casing, external power supply adapter