

## FD504GW-DX 4GE+Dual-frequency WIFI ONU



### Brief Views

FD504GW-DX dual-frequency data type ONU 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, 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 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.

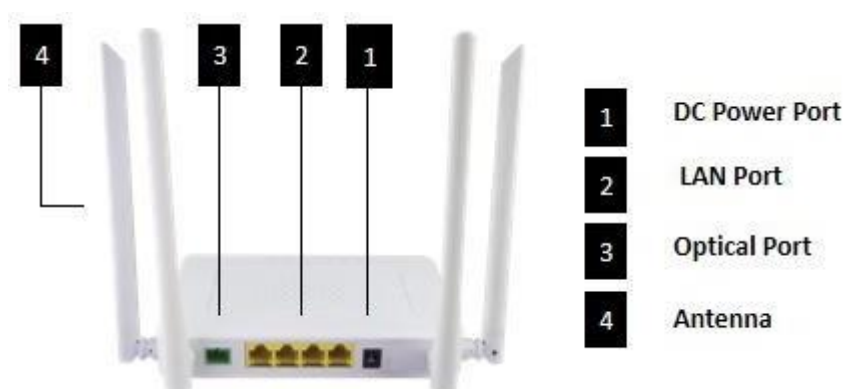
FD504GW-DX have a high reliability and provide quality of service guarantee, easy management, flexible expansion and networking. It's fully meet the ITU-T technical standards and have good compatibility with third party manufacturers OLT.

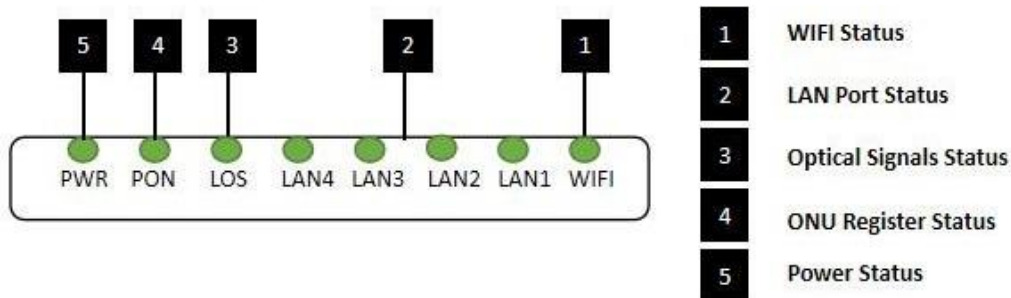
FD504GW-DX can integration wireless function with meet 802.11 a/b/g/n/ac technical standards. At the same time, it also supports 2.4GHz/5GHz dual-band wireless signal. It has the characteristics of strong penetrating power and wide coverage. It can provide users with more efficient data transmission security.

## Functional Feature

- In compliant with ITU - T G.984.1/2/3/4 standard
- Meet 802.11 a/b/g/n/ac WIFI technical standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Support Ethernet line performance statistics function
- Support OMCI+TR069 management mode
- Support VLAN tag/untag
- Support multicast Snooping/Proxy
- Support DHCP/PPPOE/Static IP internet mode
- Support port binding
- Support loop-detection function
- Support device-based speed limitation
- Support MAC-address filter and URL access control
- Support AES encryption and decryption
- Support Dynamic Bandwidth Allocation (DBA)
- Support ACL configure data packet filter flexibly
- EMS network management based on SNMP ,convenient for maintenance

## Product Interface and LED Definitions





Indicator			Description
1	WIFI	WIFI	Blinking : Data is being transmitted On : Wi-Fi function Opens Off : Wi-Fi function Close
2	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;
3	LOS	GPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
4	PON	ONU Register	On: Success to register to OLT Blinking: In process of registering to OLT; Off: In process of registering to OLT;
5	PWR	Power status	On: The ONU is power on; Off: The ONU is Power off;

## Specification

Item		Parameter
Interface	PON 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
	Ethernet Interface	4*10/100/1000M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
	Power Interface	12V DC Power supply
Performance Parameters	PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0.5~5dBm Rx Sensitivity: -28dBm Saturation Optical Power: -8dBm
	Data Transmission	PON Throughput: Downstream 2.488Gbit/s; Upstream 1.244Gbit/s

	Parameter	Ethernet: 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
<b>Network Management</b>	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
<b>Physical Features</b>	Shell	White plastic casing
	Power	External 12V DC/1A power supply adapter Power consumption: <7W
	Physical Specifications	Item Dimension: 160mm(L)*139.5mm(W)*28.5mm(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 Specification

- Comply with IEEE 802.11a/b/g/n/ac protocol standard, support 2.4GHz and 5GHz
- There are four external antennas
- 5dBi antenna gain
- Maximum ideal rate up to 1.2Gbps
- 2.4GHz supports 2\*2 MIMO (Multiple-Input Multiple-Output) technology
- 5GHz supports 2\*2 MIMO (Multiple-Input Multiple-Output) technology
- Support 8 SSIDs
- Support wider RF bandwidth, up to 80MHz
- Support higher 256-QAM modulation mode
- Support MIMO-OFDM encoding mode
- Support wireless security of 64/128 bit WEP、802.1x、WPA and WPA2

## Network Application

Typical Solution: FTTH

Typical Business: INTERNET, WIFI

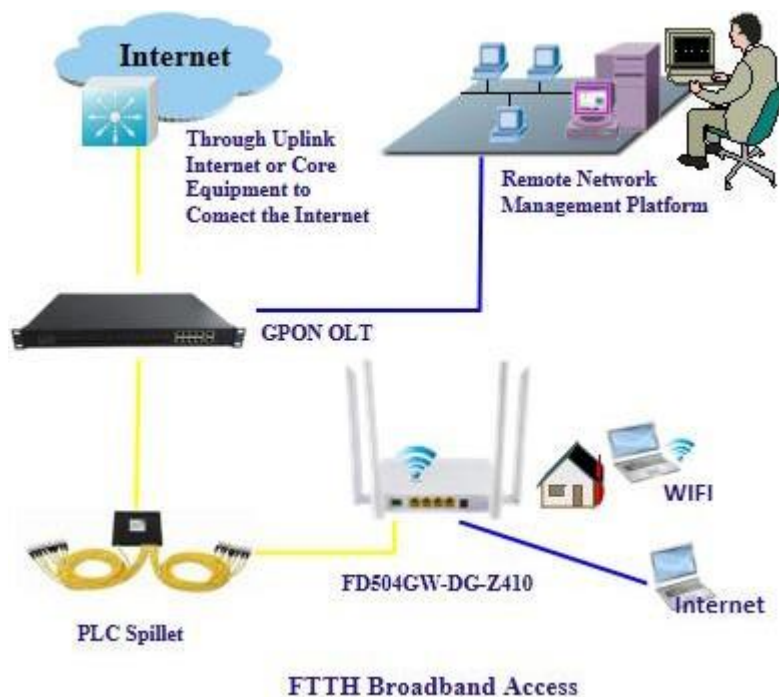


Figure: FD504GW-DG-Z410 ONU Application Diagram

## Ordering Information

Product Name	Product Model	Descriptions
Dual-frequency data type ONU	FD504GW-DX	4*10/100/1000M Ethernet interface, support dual-frequency Wi-Fi function, 1 GPON interface, plastic casing, external power supply adapter