

FD504GW-G-R410 4GE+ WIFI ONU



Brief Views

FD504GW-G-R410 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.

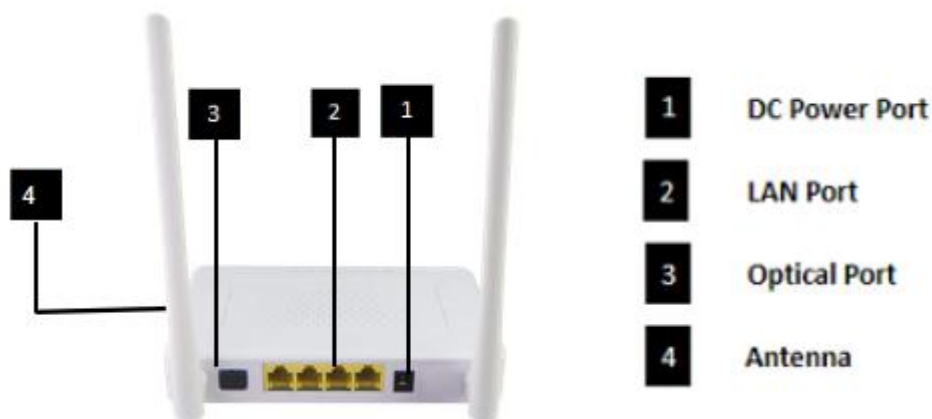
FD504GW-G-R410 have a high reliability and provide quality of service guarantee, easy management, flexible expansion and networking. It fully meets the ITU-T technical standards and have good compatibility with third party OLT.

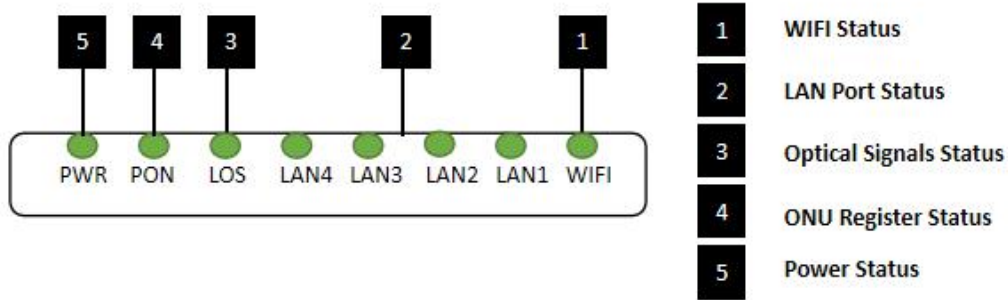
FD504GW-G-R410 integrates wireless function which meets 802.11 a/b/g/n technical standards. At the same time, it also supports 2.4GHz wireless signal. It has the characteristics of strong penetrating power and wide coverage. It can provide users with more efficient data transmission security.

Functional Feature

- In compliant with ITU - T G.984.1/2/3/4 standard
- Meet 802.11 a/b/g/n 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: WIFI function Opens Off: WIFI 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:Failed to register to OLT or no normal optical signal input;
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/UPC 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: <math><1 \cdot 10^{-12}</math> latency: <math><1.5\text{ms}</math>
Network Management	Management Mode	OMCI, TR069, WEB, Telnet
	Management Function	Status monitor, Configuration management, Alarm management, Log management
Physical Features	Power	External 12V DC/1A power supply adapter Power consumption: <math><7\text{W}</math>
	Physical Specifications	Item Dimension: 160mm(L)*139.5mm(W)*28.5mm(H) Item Net Weight: about 239g
	Environmental Specifications	Operating temperature: 0 to 40°C Operating humidity: 10% to 90%(Non-condensing)

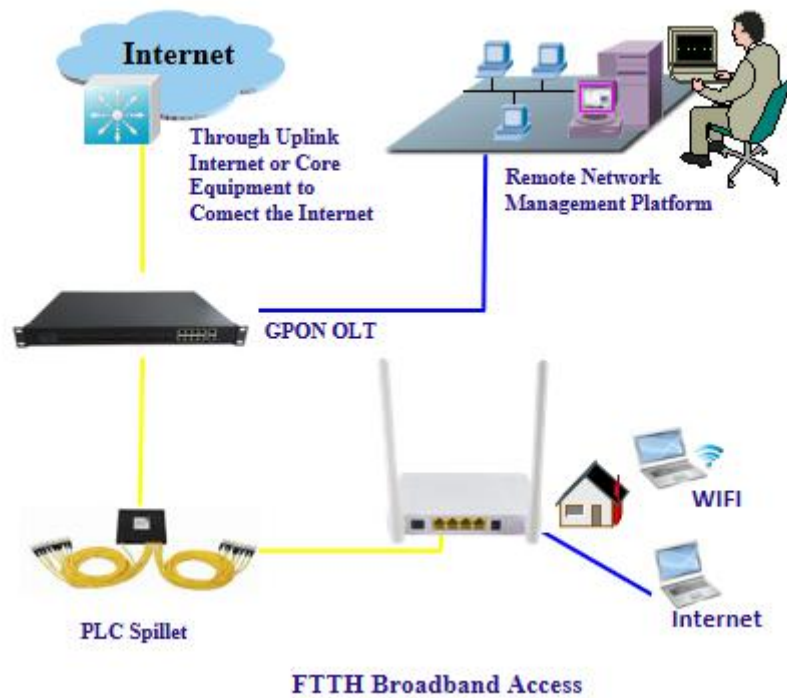

WIFI Specification

	Item	Parameter
Performance parameters	Operating Mode	Router or bridge
	Technical standard	IEEE802.11b/g/n
	Frequency	2.412 ~ 2.472 GHz
	Antenna gain	5dBi
	Support rate	802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 24, 36, 48, 54Mbps 802.11n: max rate 300Mbps
	Channel	2.4GHz Channel: 1,2,3,4,5,6,7,8,9,10,11,12,13
	Modulation mode	11b: DSSS: DBPSK(1Mbps),DQPSK(2Mbps),CCK(5.5/11Mbps) 11g: OFDM:BPSK(6/9Mbps), QPSK(12/18Mbps),16QAM(24/36Mbps) Q64QAM(48/54Mbps) 11n: MIMO-OFDM:BPSK,QPSK,16QAM,64QAM
	Receive sensitivity	11Mbps: $\leq -90\text{dBm}$ 54 Mbps: $\leq -76\text{dBm}$ HT20 MCS7: $\leq -73\text{dBm}$ HT40 MCS7: $\leq -70\text{dBm}$
	Transmit power	802.11n: 17dBm
	Encryption mode	AES, TKIP, WPA, WPA2, WPA-PSK/WPA2-PSK

Network Application

Typical Solution: FTTH

Typical Business: INTERNET, WIFI



Ordering Information

Product Name	Product Model	Descriptions
data type ONU	FD504GW-G-R410	4*10/100/1000M Ethernet interface, support WIFI function, 1 GPON interface, plastic casing, external power supply adapter