

## FD504GW-DE-R410 4GE +Dual-Band WIFI ONU



### Brief Views

FD504GW-DE-R410 dual-band ONU is a passive optical network user-end product launched by our company for the broadband access market based on EPON technology. This product can meet the needs of FTTH/FTTO fiber-to-the-home users and provide users with high Broadband access to realize integrated data and video services.

EPON technology is an emerging technology that combines the advantages of PON technology and Ethernet technology, and is a point-to-multipoint networking technology. The central office's OLT equipment is interconnected with multiple ONU equipment through an intermediate passive optical network. Combined with single-fiber bidirectional technology, the EPON system can use very few optical fiber resources to meet the multi-user access requirements of operators.

FD504GW-DE-R410 has the characteristics of high reliability and quality of service (QOS) guarantee, easy management, flexible upgrade and expansion and networking. The technical performance of the equipment meets the requirements of IEEE802.3ah, China Telecom's EPON equipment technical requirements (V2.1/V3.0) and other specifications.

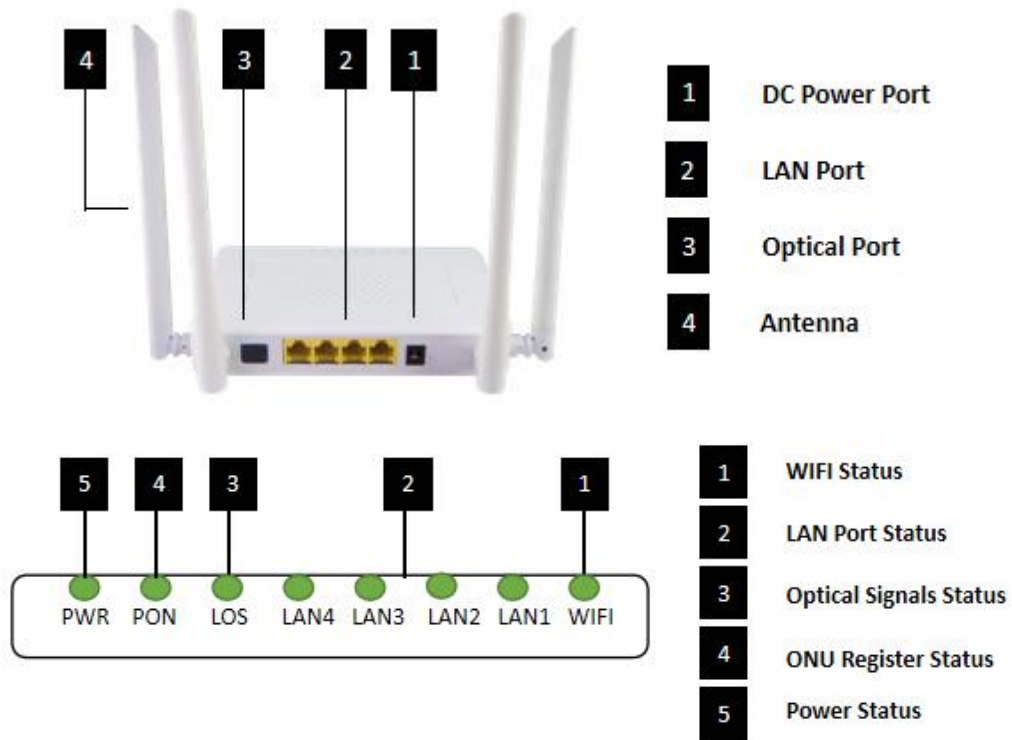
FD504GW-DE-R410 dual-band data ONU can integrate wireless functions, and supports 2.4GHz/5GHz dual-band wireless signals, and can support complete wireless networks including 802.11a/b/g/n/ac. It has the characteristics of strong penetration and wide

coverage, providing users with more efficient data transmission guarantee.

## Functional Feature

- Comply with IEEE802.3ah, China Telecom EPON equipment technical requirements (V2.1/V3.0)
- Comply with 802.11a/b/g/n/ac wireless standard protocol
- Support ONU auto-discovery/Link detection/remote upgrade of software;
- Support Ethernet line performance statistics function
- Support OAM+TR069 management mode
- Support VLAN tag/untag
- Support multicast Snooping/Proxy
- Support DHCP/PPPOE/static IP Internet service configuration
- Support port binding
- Support loop detection
- Support speed limit based on the whole machine
- Support MAC address filtering and WAN access control functions
- Support AES encryption and decryption
- Support dual management mode based on DBA technology and priority to ensure users' minimum specified bandwidth requirements
- Support our SNMP-based network management platform EMS unified network management, easy to install and maintain
- Provide rich fault alarm function, easy to fault diagnosis

## Product Interface and LED Definitions



Indicator		Description	
1	WIFI	WIFI	Blinking: Wi-Fi terminal connection 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	EPON 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
PON Interface	1 EPON optical interface Meet 1000BASE-PX20+ standard Symmetric 1.25Gbps upstream/downstream SC/UPC single-mode fiber split ratio: 1:64 Transmission distance 20KM

User Ethernet Interface	4*10/100/1000M auto-negotiation Full Duplex / Half-Duplex RJ45 Connector Auto MDI/MDI-X Transmission Distance 100 Meter
Power Interface	12V DC power supply
PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0~4dBm Rx Sensitivity: -27dBm Saturation Optical Power: -3dBm
Data Transmission Parameter	PON Throughput: Downstream 980Mbps; Upstream 950Mbps Ethernet: 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Network Management	OAM,TR069 ,WEB, Telnet
Management Function	Status monitor, Configuration management, Alarm management, Log management
Power	External 12V/1A DC power adapter Power consumption: <7W
Physical Specifications	Item Dimension: 160mm(L) x 139.5mm(W) x 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

- 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, FTTO

Typical Business: INTERNET, IPTV



## Ordering Information

Product Name	Product Model	Descriptions
Dual frequency data type ONU	FD504GW-DE-R410	4*10/100/1000M Ethernet ports; 1 EPON optical port; support dual-band WIFI function, comply with IEEE802.11a/b/g/n/ac WIFI standard; plastic case; external power supply