GPON ONU

2GE+2WIFI

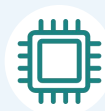**FD502GW-DG-R410**

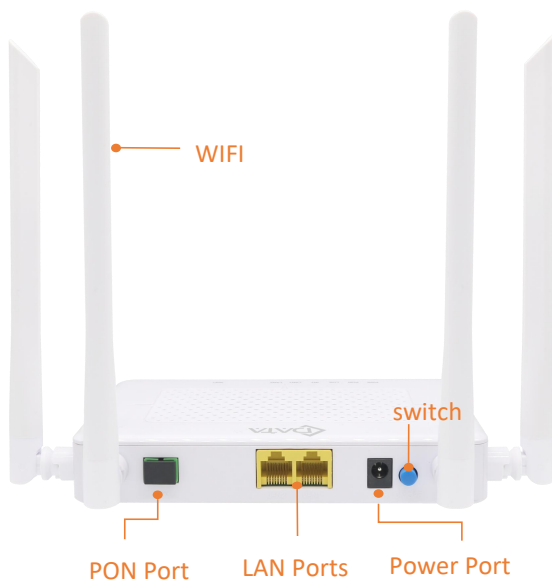| High Speed CPU | Low Power Consumption | Optional Shell Supply | Software Customization |

Brief Views

FD502GW-DG-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   based on the GPON network.

FD502GW-DG-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.

FD502GW-DG-R410 integrates wireless function which meets 802.11 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 standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Support multiple registration methods
- Support port VLAN configuration
- Support mac-address learning
- Support port-based rate limitation and bandwidth control
- Support broadcasting storm resistance function
- Meet 802.11 a/b/g/n/ac WIFI technical standard
- Support multicast function

- Support DHCP/Static/PPPOE internet mode
- Support port-binding
- Support remote management configuration
- Support Dynamic Bandwidth Allocation (DBA)
- Support AES encryption and decryption
- EMS network management based on SNMP ,convenient for maintenance
- Support power-off alarm function ,easy for link problem detection

Product Interface and LED

WIFI

switch

PON Port   LAN Ports   Power Port

POWER   PON   LOS   INT   LAN1-2   WIFI

LED Definitions

Indicator		Description
PWR	Power status	On: The ONT is power on; Off: The ONT is Power off;
PON	ONT 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;
LOS	GPON optical signals	On: Optical power lower than receiver sensitivity; Off: Optical in normal;
INT	Internet status indicator	On: The routed WAN Internet access service is normal. Off: The routed WAN Internet access service is abnormal.
LAN	LAN port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
WIFI	WIFI	Blinking：Data is being transmitted On：WIFI function Opens

Hardware

- **GPON Port**
  - Single mode single fiber
  - GPON：FSAN G.984.2 standard, Class B+
  - GPON：2.488Gbps/1.244Gbps downstream/upstream
  - Wavelength :
    Transmit: 1310nm   Receiver: 1490nm
  - Receiving sensitivity :
    GPON：-28dBm
  - Saturated power :
    GPON：-8dBm
  - Transmitting power :
    GPON：0.5～5dBm

- **User Port(LAN)**
  - RJ-45 connector
  - 2*10/100/1000 Mbps adaptive Ethernet port
  - Full/half duplex
  - Auto MDI/MDI-X
- **WIFI performance parameters**
  - IEEE802.11b/g/n(2.4G)
  - IEEE802.11a/b/g/n/ac(5G)
  - Max rate: 300M(2.4G)
  - Max rate: 867Mbps(5G)
  - Antenna gain：5dBi
  - Max TX power: 2.4G：17dBm
  - Max TX power: 2.4G：20dBm   5G：20dBm

- **Indicators**
- ➢ PWR / PON / LOS /LAN/WPS/WIFI
- **Power**
- ➢ External 12VDC/1A power supply adapter
- ➢ Power consumption: <6W
- **Dimension and Weight**
- ➢ Item Dimension：
- ➢ 160mm(L) x 139.5mm(W) x 28.5mm (H)
- ➢ Item weight：0.23kg
- **Environmental Specifications**
- ➢ Operating temperature: 0 to 40° C
- ➢ Storage temperature: -40 to 85° C
- ➢ Operating humidity: 10% to 90%(Non-condensing)

Software

- **Management**
- ➢ GPON:OMCI / WEB / TR069 / Telnet
- **Register**
- ➢ Auto-discovery/Link detection/Remote upgrade software
- ➢ Auto/MAC/SN/LOID+Password authentication
- **Switch**
- ➢ MAC address learning
- ➢ MAC address learning account limit
- ➢ Broadcast storm suppression
- ➢ VLAN transparent/tag/translate/trunk
- **L3**
- ➢ IPv4/IPv6 Dual Stack
- ➢ NAT
- ➢ DHCP client/server
- ➢ PPPOE client/ Pass through
- ➢ Static and dynamic routing

- **Multicast**
- ➢ IGMP V2
- ➢ IGMP VLAN
- **Security**
- ➢ Firewall
- ➢ MAC address/URL filter
- ➢ Remote WEB/Telnet access control
- **Wireless**
- ➢ 2.4G: 4*SSID
- ➢ 5G: 4*SSID
- ➢ 2*2 MIMO
- ➢ SSID broadcast/ hide
- ➢ Choose channel automatically

Application

➢ Typical Solution：FTTH
➢ Typical Business：Internet,WIFI