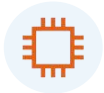# FD602X-X-R411

1GE+1FE+1POTS XPON ONU

High Speed CPU

Low Power Consumption

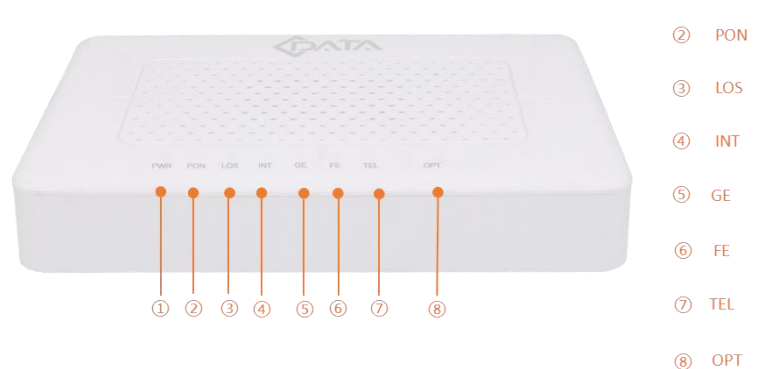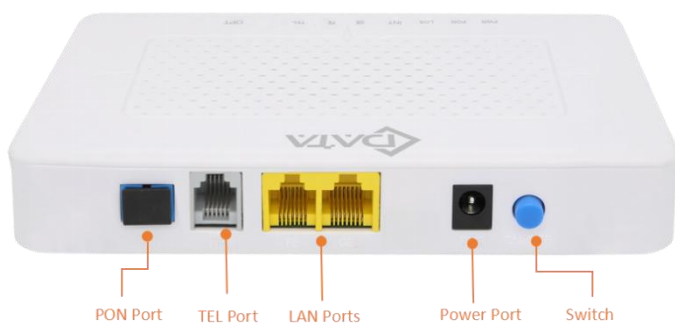Software Customization

Optional Shell Supply

Brief Views

FD602X-X-R411 dual-mode ONU supports EPON and GPON two modes access. The ONU automatically switches into the corresponding PON mode by identifying the local OLT mode to complete GPON or EPON adaptive access.

FD602X-X-R411 features high-performance forwarding capabilities to ensure excellent experience with VoIP, Internet. It fully meets the ITU-T technical standards and have good compatibility with third party OLT. It provides a perfect terminal solution and future-oriented service supporting capabilities for FTTH deployment.

Functional Feature

- In compliant with ITU-T G.984 and IEEE802.3ah standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Support multicast Snooping/Proxy
- Support DHCP/Static/PPPOE internet mode
- Support port-binding
- Support OAM/OMCI remote management
- Support data encryption and decryption function

- Support loop-detection function
- Support device-based speed limitation
- Support MAC filter and URL access control
- Support H.248 and SIP protocol
- Support power-off alarm function ,easy for link problem detection
- EMS network management based on SNMP ,convenient for maintenance

Product Interface and LED

PON Port   TEL Port   LAN Ports   Power Port   Switch

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	PWR
②	PON
③	LOS
④	INT
⑤	GE
⑥	FE
⑦	TEL
⑧	OPT

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	PON 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.
GE	GE port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
FE	FE port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
TEL	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.
OPT	Light intensity indicator	On: higher than ONU RX maximum threshold; Flashing: lower than ONU RX minimum threshold; Off: ONU RX is within the normal threshold range.

Hardware

- **GPON/EPON Port**
  - Single mode single fiber
  - GPON：FSAN G.984.2 standard,Class B+
  - EPON：1000BASE-PX20+ symmetric
  - GPON：2.488Gbps/1.244Gbps downstream/upstream
  - EPON：1.25Gbps downstream/upstream
  - Wavelength :
    Transmit: 1310nm   Receiver: 1490nm
  - Receiving sensitivity :
    GPON：-28dBm   EPON：-27dBm
  - Saturated power :
    GPON：-8dBm   EPON：-3dBm
  - Transmitting power :
    GPON：0.5～5dBm   EPON:0～4dBm

- **User Port(LAN)**
  - RJ-45 connector
  - 1*10/100 and1 *10/100/1000Mbps adaptive Ethernet port
  - Full/half duplex
  - Auto MDI/MDI-X
- **User Port(POTS)**
  - RJ-11 connector
  - 1*accounts
  - SIP protocol
  - TDMF
  - G711U/G711A/G729/G722 encoding and decoding
- **Indicators**
  - PWR / PON / LOS / GE / FE / TEL / INT/ OPT

- **Environmental Specifications**
  - Operating temperature: 0 to 40° C
  - Storage temperature: -40 to 85° C
  - Operating humidity: 10% to 90%(Non-condensing)

- **Power**
  - External 12VDC/1A power supply adapter
  - Power consumption: <6.5W
- **Dimension and Weight**
  - Item Dimension：
  - 130mm(L) x 90mm(W) x 30mm (H)
  - Item weight：93g

Software

- **Management**
  - EPON :OAM / WEB / TR069 / Telnet
  - GPON:OMCI / WEB / TR069 / Telnet
- **L3**
  - IPv4/IPv6 Dual Stack
  - NAT
  - DHCP client/server
  - PPPOE client/ Pass through
  - Static and dynamic routing
- **Switch**
  - MAC address learning
  - MAC address learning account limit
  - Port isolation
  - Port flow control
  - Broadcast storm suppression
  - VLAN transparent/tag/translate/trunk

- **Multicast**
  - IGMP V2
  - IGMP VLAN
  - IGMP transparent/Snooping/Proxy
- **Security**
  - Firewall
  - MAC address/URL filter
  - Remote WEB/Telnet access control
- **Register**
  - Auto-discovery/Link detection/Remote upgrade software
  - Auto/MAC/SN/LOID+Password authentication

Application

- Typical Solution：FTTH
- Typical Business：Internet,VOIP