

FD602XW-E-Z410 1GE+1FE+1POTS+WIFI ONU



Overview

FD602XW-E-Z410 EPON HGU is one of the EPON optical network unit design to meet the requirement of the broadband access network. It apply in FTTH/FTTO to provide the data, voice and video service based on the EPON network.

FD602XW-E-Z410 features high-performance forwarding capabilities to ensure excellent experience with VoIP, Internet and HD video services. It has good compatibility to work with the third party OLT, such as Huawei/ZTE/Fiberhome/Alcatel-Lucent. It provides a perfect terminal solution and future-oriented service supporting capabilities for FTTH deployment.

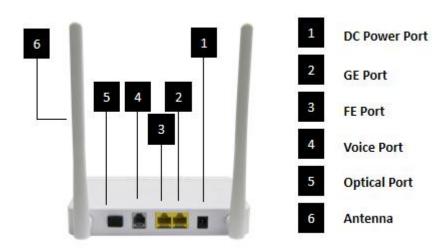
FD602XW-E-Z410 integrates wireless function which meets 802.11 b/g/n technical standards. It has two external high gain omnidirectional antennas, the wireless transmission rate up to 300Mbps. It has the characteristics of strong penetrating power and wide coverage. It can provide users with more efficient data transmission security.

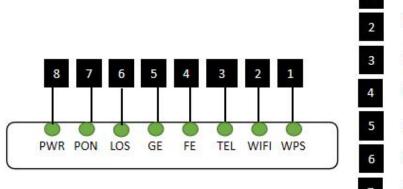


Features

- Full compatible with IEEE802.3ah
- Meet 802.11 b/g/n WIFI technical standard
- 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 mode
- Support port binding
- Support loop-detection function
- Support device-based speed limitation
- Support MAC-address filter and URL access control
- Support H.248 and SIP protocol
- Support Triple Churning 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





| 1 | WPS Status |
|---|------------------------|
| 2 | WIFI Status |
| 3 | Voice Port Status |
| 4 | FE Port Status |
| 5 | GE Port Status |
| 6 | Optical Signals Status |
| 7 | ONU Register Status |
| | |

Power Status

| Indicator | | | Description |
|-----------|------|-----------------------|---|
| 1 | WPS | WPS | Blinking: In the connected state, waiting for the device to access; Off: In the not connected state; |
| 2 | WIFI | WIFI | Blinking: Data is being transmitted On: WIFI function Opens |
| 3 | 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. |
| 4 | 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; |
| 5 | 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; |
| 6 | LOS | EPON optical signals | On: Optical power lower than receiver sensitivity; Off: Optical in normal |
| 7 | PON | ONT Register | On: Success to register to OLT; Blinking: In process of registering to OLT; Off: In process of registering to OLT; |
| 8 | PWR | Power status | On: The ONT is power on; Off: The ONT is Power off; |





| Item | Parameters | Specification |
|---------------------------------|--------------------------------|---|
| Interface | 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 |
| | Ethernet Interface | 1*10/100/1000M and 1*10/100M ports Full Duplex / Half-Duplex RJ45, Auto-MDI/MDI-X Transmission Distance 100 Meter |
| | POTS Interface | 1*RJ11 Max 1km distance Balanced Ring, 50V RMS |
| | Power Interface | 12V DC input |
| Performance Parameters | 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 or 100Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms |
| Management | Network Management | OAM, TR069, WEB, Telnet |
| | Management Function | Status monitor, Configuration management, Alarm management, Log management |
| Environmental Specifications | Power | External 12V/0.6A DC power supply adapter Power consumption: <6.5W |
| | Dimension and Weight | Item Dimension: 160mm(L)*139.5mm(W)*28.5mm(H) Item Net Weight: about 300g |
| | Environment | Operating Temperature: $0{\sim}40^{\circ}\mathrm{C}$ Operating Humidity: $10\%{\sim}90\%$ (Non-condensing) |



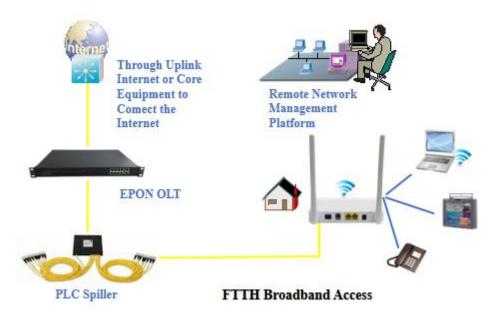
| WIFI Specification | | | | | |
|--------------------|---------------------|---|--|--|--|
| | Standard | IEEE802.11b/g/n | | | |
| | Frequency | 2.412 ~ 2.472 GHz | | | |
| | Antenna gain | 5dBi | | | |
| | Wireless data rate | IEEE 802.11b: 11Mbps | | | |
| | | IEEE 802.11g: 54Mbps | | | |
| | | IEEE 802.11n: 135Mbps | | | |
| | Modulation schemes | DSSS, CCK, OFDM | | | |
| | Code schemes | BPSK, QPSK, 16QAM and 64QAM | | | |
| | Channel | 13*Channel, configurable to meet the standard of USA, | | | |
| | Charmer | Canada, Japan and China | | | |
| | | 802.11b: | | | |
| | | -83dBm @ 1 Mbps; -79dBm @ 5.5 Mbps; | | | |
| | | -76dBm @ 11 Mbps | | | |
| | | 802.11g: | | | |
| | | -85dBm @ 6 Mbps; -77dBm @ 24 Mbps; | | | |
| | Receive sensitivity | -68dBm @ 54 Mbps; | | | |
| Performance | | 802.11n HT20: | | | |
| parameters | | -85dBm @ MCS0; -73dBm @ MCS4; | | | |
| | | -67dBm @ MCS7 802.11n HT40: | | | |
| | | -82dBm @ MCS0; -70dBm @ MCS4; | | | |
| | | -64dBm @ MCS7 | | | |
| | | 802.11b: | | | |
| | TX Power | 19 ± 1dBm @ 1 Mbps 19±1dBm @ 5.5 Mbps; | | | |
| | | 18 ±1dBm @ 11 Mbps; | | | |
| | | 802.11g: | | | |
| | | 18 ± 1dBm @ 6 Mbps 17±1dBm @ 24 Mbps; | | | |
| | | 16 ±1dBm @ 54 Mbps; | | | |
| | | 802.11n HT20: | | | |
| | | 17 ± 1dBm @ MCS0; 16 ± 1dBm @ MCS4; | | | |
| | | 15 ± 1dBm @ MCS7 | | | |
| | | 802.11n HT40: | | | |
| | | 17 ± 1dBm @ MCS0; 16 ± 1dBm @ MCS4; | | | |
| | | 15 ± 1dBm @ MCS7 | | | |
| | Encryption Mode | 64-bit, 128-bit WEP, AES, TKIP, WPA, WPA2, 802.1x | | | |



Network Application

♦ Solution: FTTH, FTTO

♦ Business: Broadband Internet, Voice, IPTV, WIFI



Ordering Information

| Product Name | Product Model | Descriptions |
|--------------------|----------------|---|
| 1GE+1FE+1POTS+WIFI | FD602XW-E-Z410 | 1*10/100/1000M and 1*10/100M Ethernet interface, 1*POTS interface, 1*EPON interface, support WIFI function, plastic casing, external power supply adapter |