

FD704GW-AE-Z410 4GE+CATV +WIFI EPON ONU



Brief Views

FD704GW-AE-Z410 is fiber to the home multiple service access EPON ONU. It's based on the mature, stable, high cost performance EPON technology and has gigabit Ethernet switching, WDM and HFC technology. FD704GW-AE-Z410 has a higher bandwidth, higher reliability, easy management and good quality of service (QoS) guarantee with technical performance of equipment meet the IEEE802.3ah requirements and have good compatibility with third party OLT.

It adopts single fiber WDM technology with downlink wavelength 1550nm and 1490nm, uplink wavelength 1310nm . It only needs one-core fiber to transmit data and CATV service.

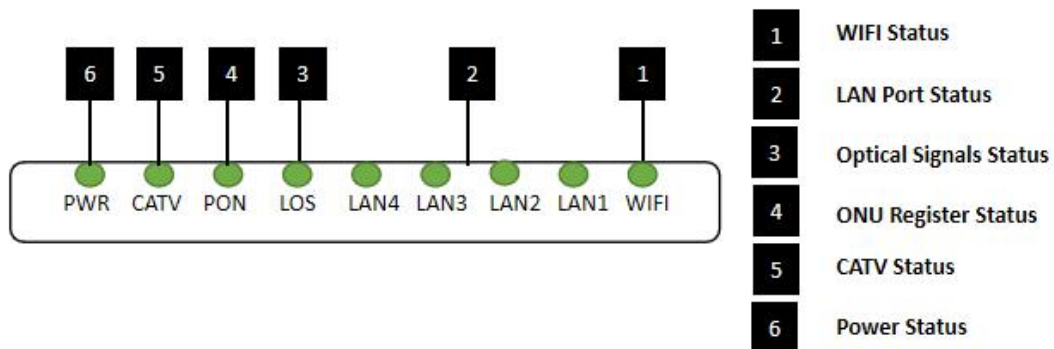
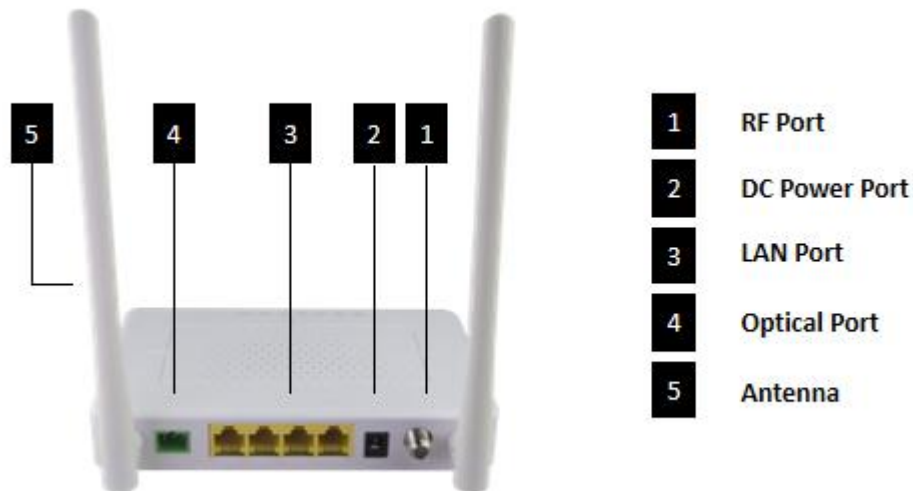
FD704GW-AE-Z410 integrates wireless function which meets 802.11b/g/n technical standards. It has two external high gain omnidirectional antennas, the wireless transmission rate up to 300Mbps. It has the characteristics of strong penetrating power and wide coverage. It can provide users with more efficient data transmission security.

Functional Feature

- Single-fiber access, provides internet, CATV, WIFI multiple service
- In compliant with IEEE802.3ah Standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Meet 802.11 b/g/n technical standards

- Support VLAN transparent, tag configuration
- Support multicast function
- Support DHCP/Static/PPPOE internet mode
- Support port-binding
- Support OAM+TR069 remote management
- Support data encryption and decryption function
- Support Dynamic Bandwidth Allocation (DBA)
- Support MAC filter and URL access control
- Support remote CATV port management
- Support power-off alarm function ,easy for link problem detection
- Specialized design for system breakdown prevention to maintain stable system
- 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
2	LAN	GE 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;
5	CATV	CATV status	On: CATV optical normal Off: The CATV signals are not received
6	PWR	Power status	On: The ONU is power on Off: The ONU is Power off



Specification

Item		Parameter
Interface	PON Interface	1 EPON optical interface Meet 1000BASE-PX20+ standard Symmetric 1.25Gbps upstream/downstream SC/APC single-mode fiber split ratio: 1:64 Transmission distance 20KM
	CATV Interface	1 RF output F-Type Connector
	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: 0~4dBm 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	Management Mode	QAM, TR069, WEB, Telnet
	Management Function	Status monitor, Configuration management, Alarm management, Log management

Physical Features	Power	Power supply: DC 12V /1A Power consumption: <9W
	Physical Specifications	Item Dimension: 160mm(L)*139.5mm(W)*28.5mm(H) Item Net Weight: about 231g
	Environmental Specifications	Operating temperature: 0 to 40°C Operating humidity: 10% to 90%(Non-condensing)


CATV

Item	Parameter
Wavelength	1550nm
Optical return loss	>45dB
Input optical power	-18dBm~0dBm
RF frequency	47MHz~1000MHz
RF output lever	82dBuV (@-12~-2dBm@85MHz)
CNR	>41dB (@-10dBm@DS22 Channel)
CSO	>58dBc (@-10dBm@DS22 Channel)
CTB	>58dBc (@-10dBm@DS22 Channel)
RF output return loss	>12dB
RF impedance	75 Ω
AGC function	Support


WIFI Specification

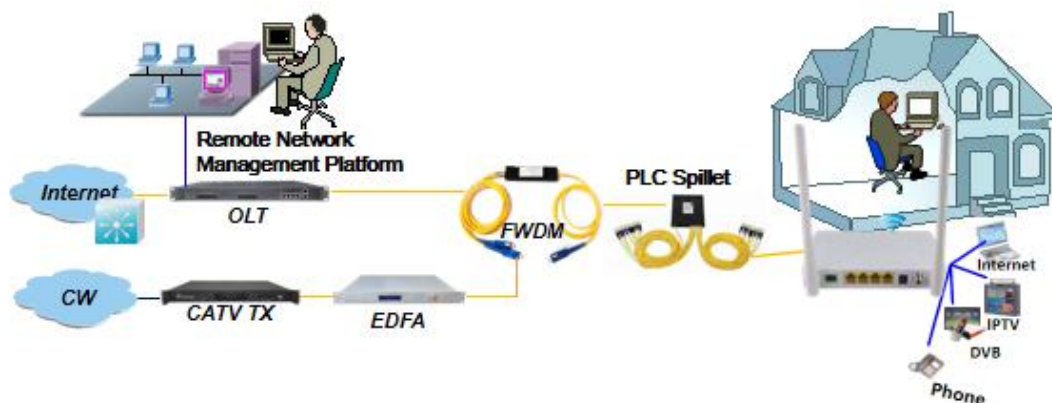
Item	Parameter	
Performance parameters	Operating Mode	Router or bridge
	Antenna gain	5dBi
	WIFI antenna	2 external antennas
	Throughput	IEEE 802.11b: 11Mbps IEEE 802.11g: 54 Mbps IEEE 802.11n: 300Mbps
	Frequency	2.412 ~ 2.472 GHz
	Channel	13*Channel, configurable to meet the standard of USA, Canada, Japan and China
	Modulation	DSSS , CCK and OFDM
	Coding	BPSK, QPSK, 16QAM and 64QAM
	Receive sensitivity	802.11b: -83dBm @ 1 Mbps; -79dBm @ 5.5 Mbps;

		<p>-76dBm @ 11 Mbps</p> <p>802.11g: -85dBm @ 6 Mbps; -77dBm @ 24 Mbps; -68dBm @ 54 Mbps;</p> <p>802.11n HT20: -85dBm @ MCS0; -73dBm @ MCS4; -67dBm @ MCS7</p> <p>802.11n HT40: -82dBm @ MCS0; -70dBm @ MCS4; -64dBm @ MCS7</p>
	Output power	<p>802.11b: 19 ± 1dBm @ 1 Mbps 19±1dBm @ 5.5 Mbps; 18 ±1dBm @ 11 Mbps;</p> <p>802.11g: 18 ± 1dBm @ 6 Mbps 17±1dBm @ 24 Mbps; 16 ±1dBm @ 54 Mbps;</p> <p>802.11n HT20: 17 ± 1dBm @ MCS0; 16 ± 1dBm @ MCS4 ; 15 ± 1dBm @ MCS7</p> <p>802.11n HT40: 17 ± 1dBm @ MCS0; 16 ± 1dBm @ MCS4 ; 15 ± 1dBm @ MCS7</p>
	Encryption Mode	802.11i security: WEP-64/128, TKIP (WPA-PSK) and AES (WPA2-PSK)

Network Application

Typical Solution: FTTH

Typical Business: INTERNET, WIFI, CATV



Ordering Information

Product Name	Product Model	Descriptions
4GE+CATV+WIFI Single fiber	FD704GW-AE-Z410	4*10/100/1000M Ethernet interface, 1 EPON interface, built-in FWDM, 1 RF interface, support AGC function, support WIFI function, plastic casing, external power supply adapter