

FD804XW-G-Z710 1GE+3FE+2POTS+WIFI+CATV GPON ONT



Brief Views

FD804XW-G-Z710 is fiber to the home multi service access GPON ONT. It's based on the mature, stable, high cost performance GPON technology and has gigabit Ethernet switching, WDM and HFC technology. FD804XW-G-Z710 features high-performance forwarding capabilities to ensure excellent experience with VoIP, Internet and CATV services. FD804XW-G-Z710 has a higher bandwidth, higher reliability, easy management and good quality of service (QoS) guarantee with technical performance of equipment meet the ITU G.984 requirements and have good compatibility with third party manufacturers OLT.

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

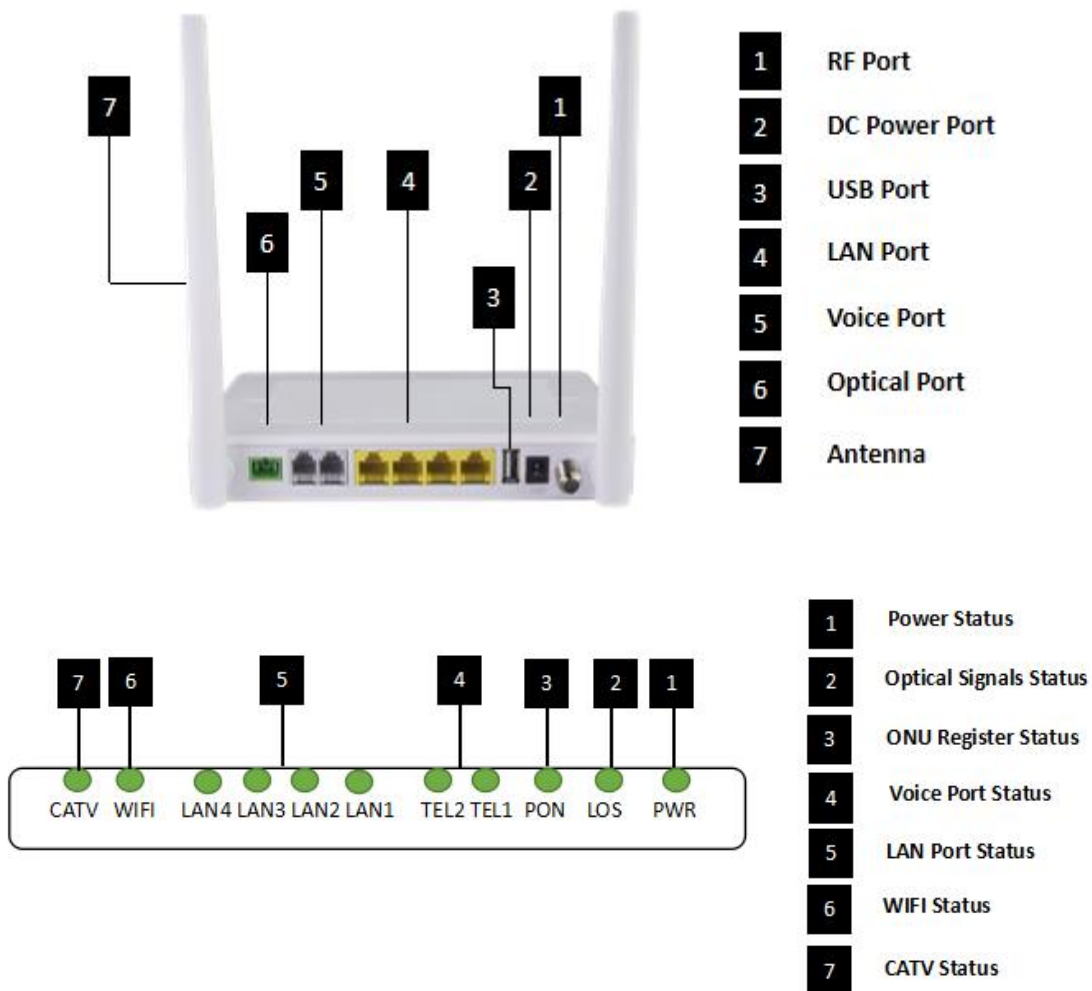
FD804XW-G-Z710 can integration wireless function with meet 802.11 n/b/g technical standards. It has external high gain directional antenna, the wireless transmission rate up to 300Mbps. It has the characteristics of strong penetrating power and wide coverage. It can provide users with more efficient data transmission security.

Functional Feature

- In compliant with ITU - T G.984.1/2/3/4 standard
- Single-fiber access, provide Internet, voice, CATV and WIFI multiple services
- Meet 802.11 n/b/g WIFI technical standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Support Ethernet line performance statistics function

- Support OMCI+TR069 management mode
- Support VLAN tag/untag
- Support multicast Snooping/Proxy
- 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 AES encryption and decryption
- Support Dynamic Bandwidth Allocation (DBA)
- Support ACL configure data packet filter flexibly
- EMS network management based on SNMP ,convenient for maintenance
- Support remote CATV port management

Product Interface and LED Definitions



Indicator			Description
1	PWR	Power status	On: The ONT is power on; Off: The ONT is Power off;
2	LOS	GPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
3	PON	ONT Register	On: Success to register to OLT; Blinking: In process of registering to OLT; Off: In process of registering to OLT;
4	TEL1-2	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.
5	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;
6	WIFI	WIFI	Blinking: Data is being transmitted On: Wi-Fi function Opens
7	CATV	CATV status	On: CATV optical normal Off: The CATV signals are not received



Specification

Item		Parameter
Interface	PON Interface	1*GPON port, FSAN G.984.2 standard, Class B+ Downstream Data Rate: 2.488Gbps Upstream Data Rate: 1.244Gbps SC/PC single mode fiber 28dB Link loss and 20KM distance with 1:128
	CATV Interface	1 RF output F-Type Connector
	POTS Port	2*RJ11 Max 1km distance Balanced Ring, 50V RMS
	Ethernet Interface	1*10/100/1000M and 3*10/100M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
	USB interface	1*USB 2.0 interface Transmission Rate: 480Mbps
	Power Interface	12V DC Power supply
Performance	PON Optical	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0.5~5dBm

Parameters	Parameter	Rx Sensitivity: -28dBm Saturation Optical Power: -8dBm Connector Type: SC Optical Fiber: 9/125µm single-mode fiber
	Data Transmission Parameter	PON Throughput: Downstream 2.488Gbit/s; Upstream 1.244Gbit/s Ethernet: 100Mbps or 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Network Management	Management Mode	Standard compliant OMCI interface as defined by ITU-T G.984.4 Support TR069 and WEB management
	Management Function	Status monitor, Configuration management, Alarm management, Log management
Physical Features	Shell	Plastic casing
	Power	External 12VDC/1A power supply adapter Power consumption: <9.5W
	Dimension and Weight	Item Dimension: 240mm(L) x 240mm(W) x 24mm (H) Item weight: 0.4kg
	Environmental Specifications	Operating temperature: 0 to 50°C Storage temperature: -40 to 85°C Operating humidity: 10% to 90%(Non-condensing) Storage humidity: 10% to 90%(Non-condensing)

WIFI Features

- IEEE 802.11n compliant, 2.4 GHz
- Full IEEE 802.11b/g legacy compatibility with enhanced performance
- Two-stream spatial multiplexing up to 300 Mbps PHY data rates
- Support multi-SSID (Maximum 4 SSID)
- Support automatic channel selection
- Support hide SSID
- Support wireless security of 64/128 bit WEP、802.1x、WPA and WPA2

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; -76dBm @ 11 Mbps 802.11g: -85dBm @ 6 Mbps; -77dBm @ 24 Mbps; -68dBm @ 54 Mbps; 802.11n HT20: -85dBm @ MCS0; -73dBm @ MCS4; -67dBm @ MCS7 802.11n HT40: -82dBm @ MCS0; -70dBm @ MCS4; -64dBm @ MCS7
	TX power	802.11b: 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	802.11i security: WEP-64/128, TKIP (WPA-PSK) and AES (WPA2-PSK)	


CATV

Item	Parameter
Wavelength	1550nm
Optical return loss	>45dB
Input optical power	-15dBm ~ +2dBm
RF frequency	47MHz~1000MHz

RF output lever	$\geq 65\text{dBuV}$ (@-12dBm@85MHz)
Flatness	$< \pm 1.5\text{db}$
CNR	$\geq 42\text{dB}$ (@-10dBm@DS22 Channel)
CSO	$\leq -60\text{dBc}$ (@-10dBm@DS22 Channel)
CTB	$\leq -65\text{dBc}$ (@-10dBm@DS22 Channel)
RF output return loss	$> 10\text{dB}$
RF impedance	75Ω

Network Application

Typical Solution: FTTH, FTTO

Typical Business: Internet, IPTV, CATV, Voice, VOD, Camera, Wi-Fi

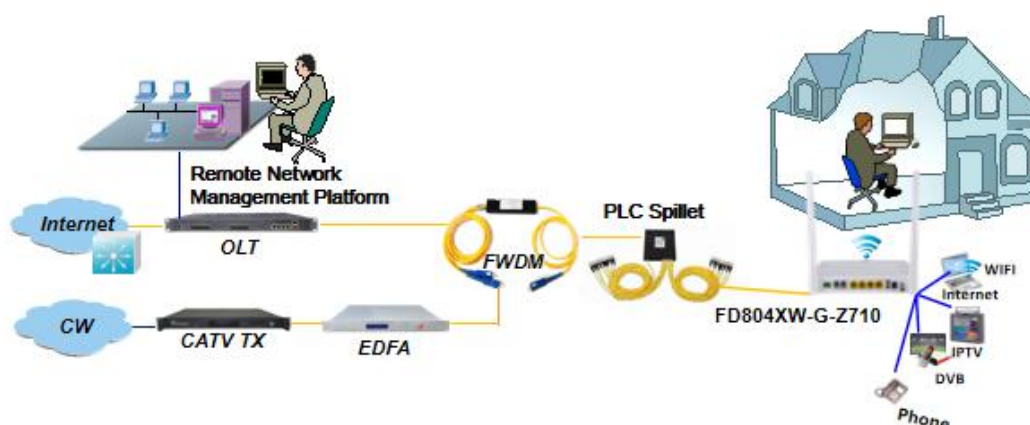


Figure: FD804XW-G-Z710 ONU Application Diagram

Ordering Information

Product Name	Product Model	Descriptions
GPON HGU	FD804XW-G-Z710	1*10/100/1000M and 3*10/100M Ethernet interface, 1 GPON interface, 2 POTS interface, 1 USB interface, 1 RF interface, built-in FWM, support Wi-Fi function, Plastic casing, external power supply adapter