

FD704GW series 4GE+ CATV+ Wi-Fi Single Fiber GPON ONT



Brief Views

ONT FD704GW (4GE+RF+Wi-Fi) series is a FTTH bandwidth access equipment .Based on mature and stable GPON technology, it has powerful functions with high stability ,QoS guarantee ,comprehensive management and flexible networking construction, etc.ONTFD704GW series is fully compatible with ITU-T G.984 technology standard.

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

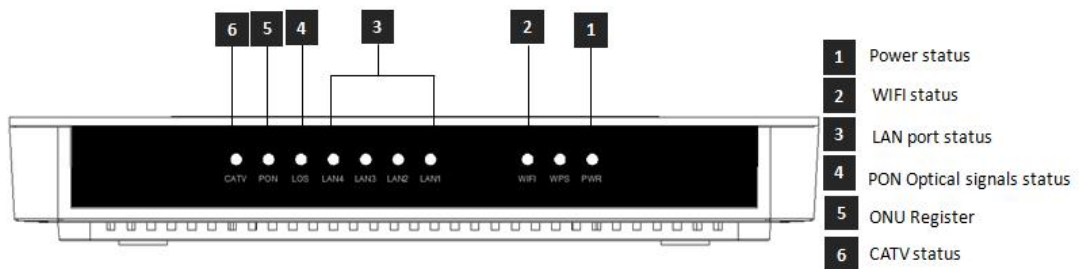
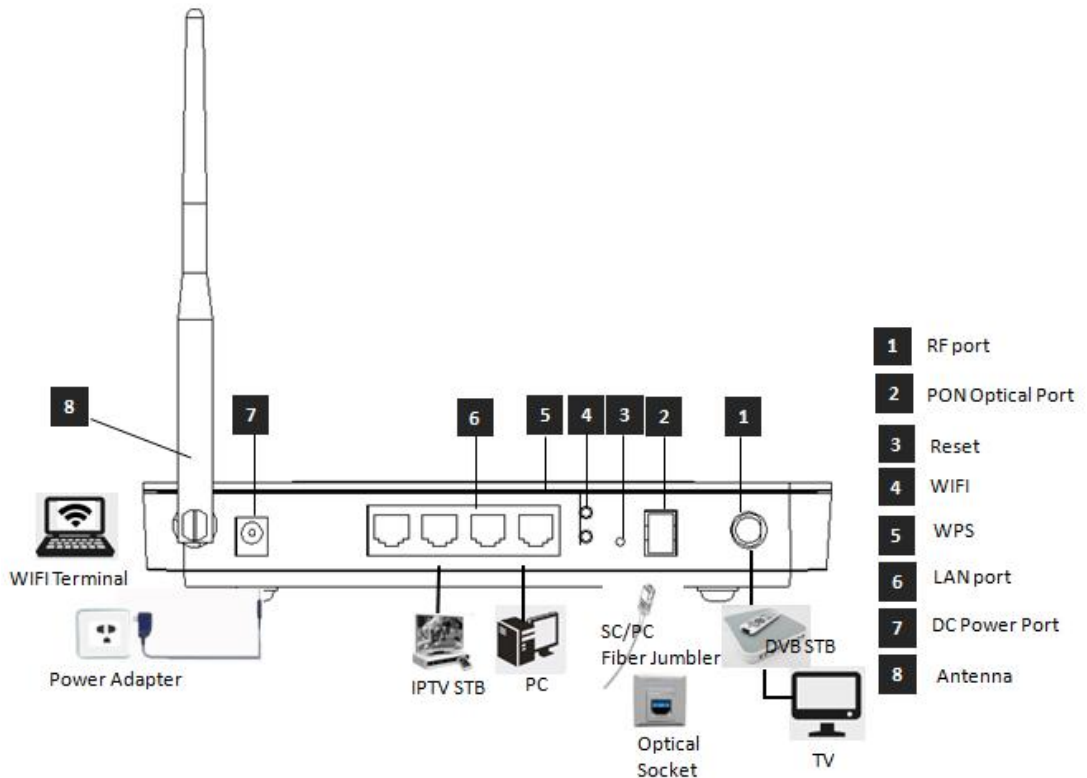
ONT FD704GW series has 1 PON port , four 10/100/1000BASE-T ports and one CATV output, support Wi-Fi function.

Functional Feature

- Full compatible with ITU-T G.984
- Support four GE auto-adapting Ethernet ports
- Support one CATV output
- Support one 802.11 n/b/g WiFi port
- Support OMCI and TR069 for remote management
- Support Web for local management
- Support Auto-negotiation and MDI/MDIX
- Support the Ethernet interface rate, working mode and flows control
- Support loopback at UNI
- Support packet filtering and anti-illegal message attack protection
- Support performance statistics of Ethernet lines
- Support VLAN tagged label processing, traffic classification and packet filtering, STP/RSTP etc.

- Support DHCP Option60 reporting the location information of the Ethernet interface
- Support PPPoE+ for accurate subscribers identification
- Support IGMP Snooping
- Support AES-128
- CATV support turn on/off RF output remotely

Product interface and LED definitions



Indicator		Description	
1	PWR	Power status	On: The ONT is power on Off: The ONT is Power off
2	WIFI	WIFI	Blinking : Data is being transmitted On : Wi-Fi function Opens
3	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
4	LOS	GPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal

5	PON	ONT Register	On: Success to register to OLT Blinking: In process of registering to OLT Off: Failed to register to OLT;
6	CATV	CATV status	On : CATV optical normal Off : The CATV signals are not received

Specification

Item		Parameter
Interface	Uplink 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 30KM distance with 1:128
	CATV Interface	1 RF output Female 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, Rx 1490nm Tx Optical Power: 0~5dBm Rx Sensitivity: -27dBm 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: 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
	Business Capability	Layer 2 wire speed switching Support VLAN TAG/UNTAG, VLAN conversion Support Port-based speed limitation Support Priority classification Support storm control of broadcast Support link detection
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: <8W
	Dimension and Weight	Item Dimension: 200mm(L) x 140mm(W) x 33mm (H) Item weight: 0.5kg
	Environmental Specifications	Operating temperature: 0 to 50°C Storage temperature: -40 to 85°C Operating humidity: 10% to 90%(Non-condensing) Storage humidity: 5% to 95%(Non-condensing)

WIFI Features

- Wi-Fi Specification 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

WIFI Specification		
Performance parameters	Standard	IEEE802.11b/g/n
	Frequency	2.400 ~ 2.500 GHz
	Wireless data rate	IEEE 802.11b: 1,2,5.5,11Mbps IEEE 802.11g: 6,9,12,18,24,36,48,54Mbps IEEE 802.11n: up to 200 Mbps
	Modulation schemes	802.11g: 64QAM, 16QAM, QPSK, BPSK, DSSS 802.11b: CCK, DQPSK, DBPSK HT20: 64 QAM, 16QAM, QPSK, BPSK
	Channel	13*Channel, configurable to meet the standard of USA, Canada, Japan and China
	RF receive sensitivity	802.11b: -96dBm @ 1 Mbps; -93dBm @ 2 Mbps; -91dBm @ 5.5 Mbps; -88dBm @ 11 Mbps 802.11g: -90dBm @ 6 Mbps; -89dBm @ 9 Mbps; -89dBm @ 12 Mbps; -867dBm @ 18 Mbps; -83dBm @ 24 Mbps; -79dBm @ 36 Mbps; -75dBm @ 48 Mbps; -75dBm @ 54 Mbps 802.11n: -96dBm @ 1 Mbps;-88dBm @ 11 Mbps; -90dBm@6Mbps; -75dBm@54Mbps; -86dBm@m0/20MHz;-69dBm@m15/20MHz;
	RF Tx Power	•TX power out B mode @ 11 Mbps: 18dBm +/- 2

		<ul style="list-style-type: none"> • TX power out G mode @ 54 Mbps: 16dBm +/- 2 • TX power 11n mode @ HT20: 16 dBm +/-2
	Encryption Mode	64-bit, 128-bit WEP, AES, TKIP, WPA, WPA2, 802.1x
	Transmission distance	100m indoors coverage area 300m outdoors coverage area (varying depending on the actual environment)

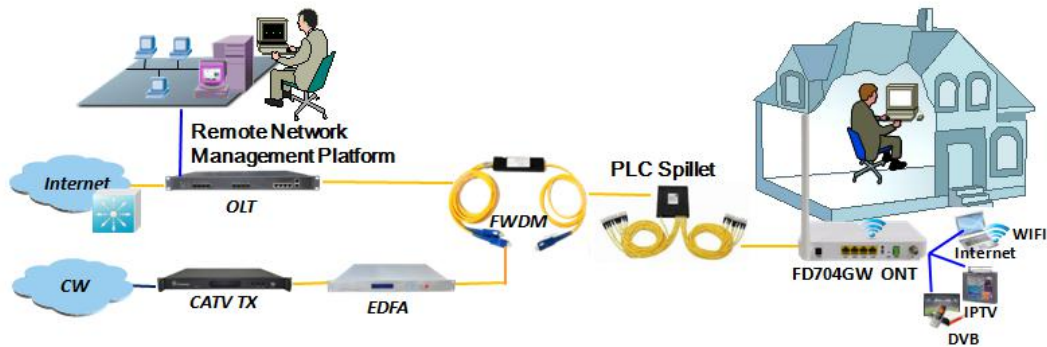


Item	Parameter	Remark
Wavelength	1100-1600nm	
Optical return loss	>45dB	
Input optical power	-15dBm ~ 0dBm	FD704GW
	-18dBm ~ -9dBm	FD704GWL
	-18dBm ~ 0dBm	FD704GWA
RF frequency	47MHz~1000MHz	
RF output lever	84dBuV (@-5dBm@85MHz)	FD704GW
	81dBuV (@-10dBm@85MHz)	FD704GWL
	78dBuV (@-12~-2dBm@85MHz)	FD704GWA
CNR	>47dB (@-5dBm@ DS22 Channel)	FD704GW
	>41dB (@-10dBm@DS22 Channel)	FD704GWL、FD704GWA
CSO	>60dBc (@-5dBm@ DS22 Channel)	FD704GW
	>60dBc (@-10dBm@DS22 Channel)	FD704GWL、FD704GWA
CTB	>60dBc (@-5dBm@ DS22 Channel)	FD704GW
	>60dBc (@-10dBm@DS22 Channel)	FD704GWL、FD704GWA
RF output return loss	>14dB	FD704GW
	>12dB	FD704GWL、FD704GWA
RF impedance	75Ohm	
AGC function	Support	FD704GWA



- ◇ Typical Solution: FTTH, FTTO, PON+EOC
- ◇ Typical Business: INTERNET, CATV, IPTV, VOD, IP Camera, Wi-Fi

Network Construction



Ordering information

Product Name	Product Model	Descriptions
4GE + CATV+ Wi-Fi GPON ONT	FD704GW	4*10/100/1000M Ethernet interface, 1 GPON interface, support Wi-Fi function, Input optical power -15dBm~0dBm, Plastic casing, external power supply adapter
	FD704GWL	4*10/100/1000M Ethernet interface, 1 GPON interface, support Wi-Fi function, Input optical power -18dBm~-9dBm, Plastic casing, external power supply adapter
	FD704GWA	4*10/100/1000M Ethernet interface, 1 GPON interface, support Wi-Fi and AGC function, Input optical power -18dBm~0dBm, Plastic casing, external power supply adapter