

FD704XW-AE-R410 1GE+3FE+CATV+WIFI ONU



Brief Views

FD704XW-AE-R410 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. FD704XW-AE-R410 has a higher bandwidth, higher reliability, easy management and good quality of service (QoS) guarantee. Its technical performance meets the IEEE802.3ah requirements and has good compatibility with third party OLT.

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

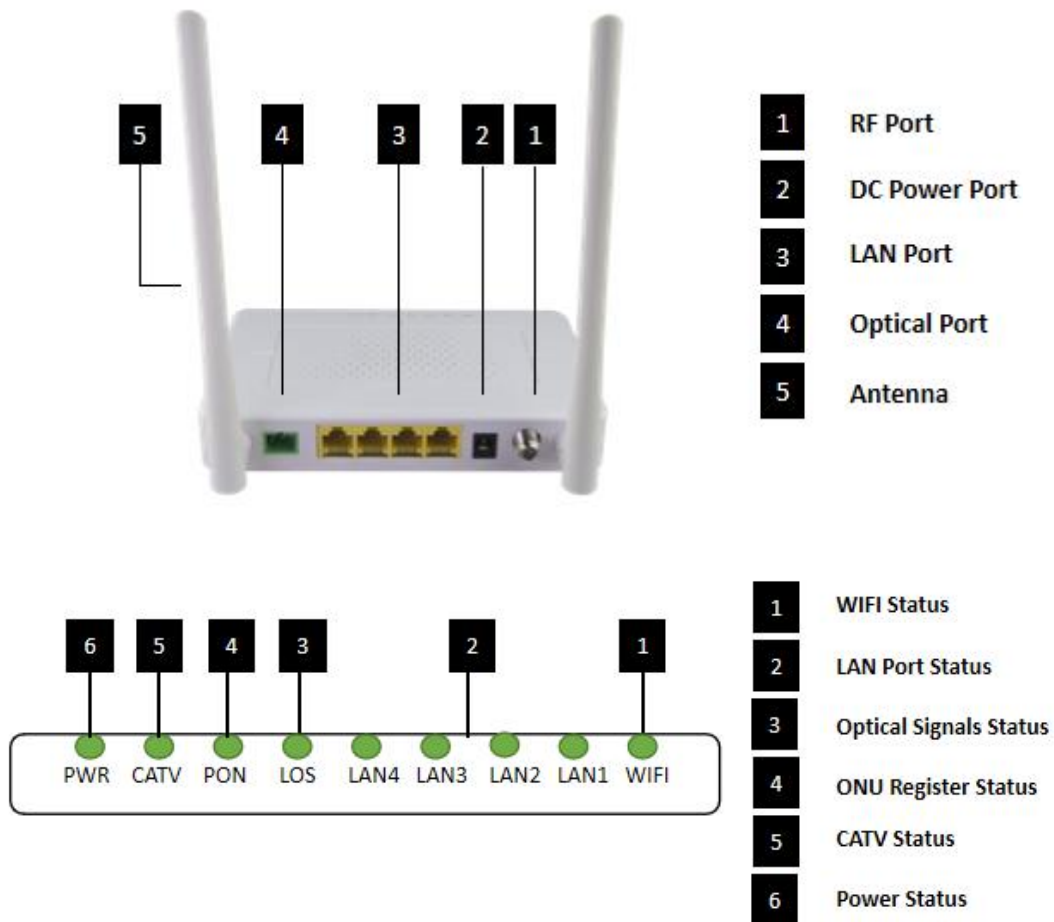
FD704XW-AE-R410 integrates wireless function which meets 802.11 b/g/n technical standards. It has two external high gain omnidirectional antennas and the wireless transmission rate up to 300Mbps. It has the characteristics of strong penetrating power and wide coverage. It can provide users with more 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: Wi-Fi function Opens
2	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
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	1*10/100/1000M and 3*10/100M 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: 100Mbps or 1000Mbps Packet Loss Ratio: 1×10^{-12} latency: <math>< 1.5\text{ms}</math>
Network Management	Management Mode	QAM, TR069, WEB, Telnet
	Management Function	Status monitor, Configuration management, Alarm management, Log management

Physical Features	Power	<8.5W, 12V/1A power supply adapter
	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	75Ω
AGC function	Support


WiFi Specification

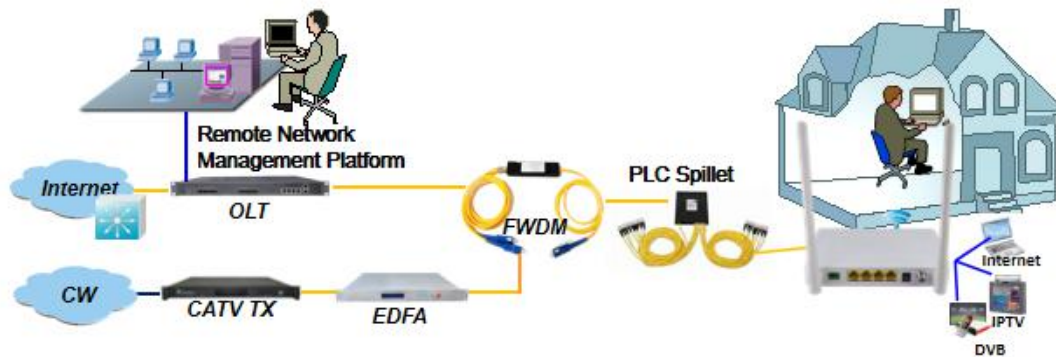
Item	Parameter	
Performance parameters	Operating mode	Router or bridge
	Technical standard	IEEE802.11b/g/n
	Frequency	2.412 ~ 2.472 GHz
	Antenna gain	5dBi
	Support rate	802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 24, 36, 48, 54Mbps 802.11n: max rate 300Mbps
	Channel	2.4GHz Channel: 1,2,3,4,5,6,7,8,9,10,11,12,13
	Modulation mode	11b: DSSS: DBPSK(1Mbps),DQPSK(2Mbps),CCK(5.5/11Mbps) 11g: OFDM:BPSK(6/9Mbps), QPSK(12/18Mbps),16QAM(24/36Mbps) Q64QAM(48/54Mbps) 11n: MIMO-OFDM:BPSK,QPSK,16QAM,64QAM

	Receive sensitivity	11Mbps: $\leq -90\text{dBm}$ 54 Mbps: $\leq -76\text{dBm}$ HT20 MCS7: $\leq -73\text{dBm}$ HT40 MCS7: $\leq -70\text{dBm}$
	Transmit power	802.11n: 17dBm
	Encryption mode	AES, TKIP, WPA, WPA2, WPA-PSK/WPA2-PSK

Network Application

Typical Solution: FTTH

Typical Business: INTERNET, WIFI, CATV



Ordering Information

Product Name	Product Model	Descriptions
1GE+3FE+CATV+WIFI Single fiber	FD704XW-AE-R410	1*10/100/1000M and 3*10/100M Ethernet interface, 1 EPON interface, 1 RF interface, built-in FWDM, support AGC function, support WIFI function, plastic casing, external power supply adapter