

FD704X-AG-R410 Single-Fiber 1GE+3FE+CATV ONU



Brief Views

FD704X-AG-R410 is fiber to the home multiple 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. It has a higher bandwidth, higher reliability, easy management and good quality of service (QoS) guarantee. The technical performance of equipment meet the ITU-G. 984 requirements and have good compatibility with third party OLT.

GPON is the latest generations of access network technology. ITU-T G.984 is the standard protocol of GPON. The GPON standard differs from other PON standards in that it achieves higher bandwidth and higher efficiency using larger, variable-length packets. GPON offers efficient packaging of user traffic, with frame segmentation allowing higher quality of service (QOS) for delay-sensitive voice and video communications traffic. GPON network provides the reliability and performance expected for business services and provides an attractive way to deliver residential services. GPON enables fiber to the home (FTTH) deployments economically resulting to accelerated growth worldwide.

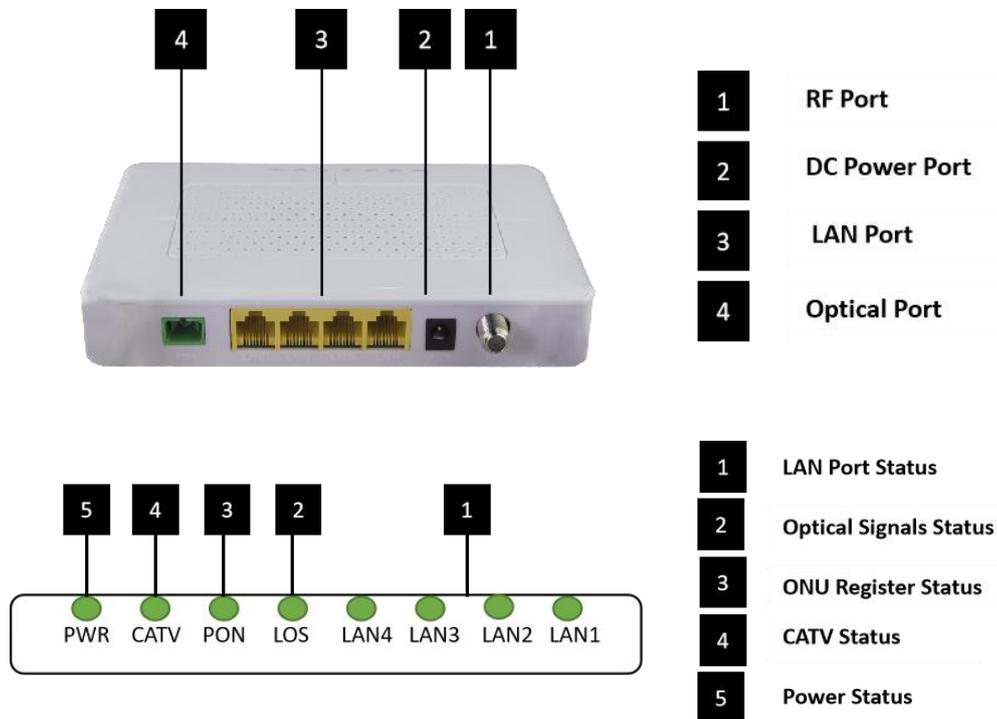
It adopts single fiber WDM technology with downlink wavelength 1550nm and 1490nm, uplink wavelength 1310nm . It only needs one-core fiber to transmit data and CATV service.

Functional Feature

- In compliant with ITU - T G.984 Standard, adapting GPON upstream
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Support SN and LOID+Password multiple registration methods
- Support port VLAN configuration
- Support mac-address learning
- Support port-based rate limitation and bandwidth control
- Support port flow-control

- Support broadcasting storm resistance function
- Support igmp transparent/snooping/proxy mode
- Support remote management configuration
- Support Dynamic Bandwidth Allocation (DBA)
- Support AES encryption and decryption
- Support remote CATV port management
- EMS network management based on SNMP ,convenient for maintenance
- Support power-off alarm function ,easy for link problem detection

Product Interface and LED Definitions



Indicator		Description
1	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
2	LOS	GPON optical signals On: Optical power lower than receiver sensitivity ; Off: Optical in normal
3	PON	ONU Register On: Success to register to OLT Blinking: In process of registering to OLT Off: Failed to register to OLT;
4	CATV	CATV status On: CATV optical normal Off: The CATV signals are not received
5	PWR	Power status On: The ONU is power on Off: The ONU is Power off


Specification

Item	Parameters	Specification
Interface	PON Port	1*GPON port, FSAN G.984.2 standard, Class B+ SC/APC single mode fiber Downstream Data Rate: 2.488Gbps Upstream Data Rate: 1.244Gbps 28dB Link loss and 20KM distance with 1:128
	Ethernet Port(LAN)	1*10/100/1000M and 3*10/100M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
	CATV Interface	1 RF output F-Type Connector
Performance Parameters	PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0.5~5dBm Rx Sensitivity: -28dBm Saturation Optical Power: -8dBm
	Data Transmission Parameter	PON Throughput: Downstream 2.488Gbit/s ; Upstream 1.244Gbit/s Ethernet: 1000Mbps or 100Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Management	Management Mode	OMCI, 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
	Dimensions	Item Dimension: 160mm(L)*112mm(W)*28.5mm(H) Item Net Weight: about 258g
	Environment	Operating temperature: 0 to 40°C Operating humidity: 10% to 90%(Non-condensing)

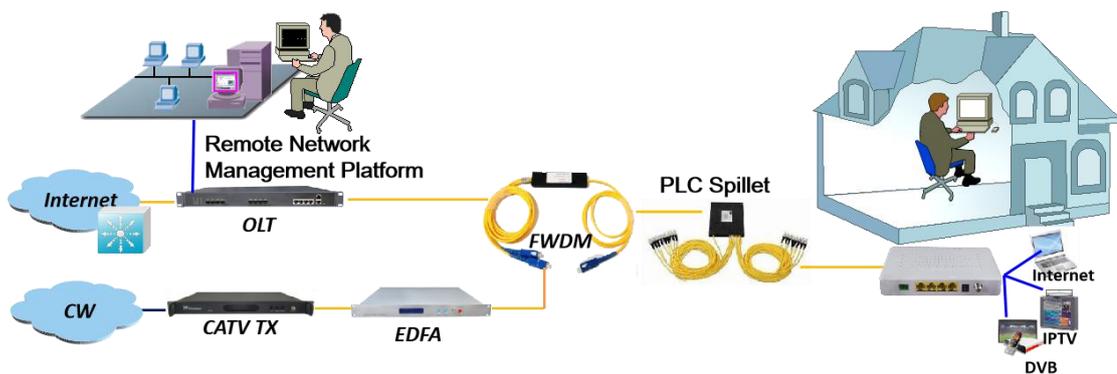
CATV

Item	Parameter
Wavelength	1550nm
Optical return loss	>45dB
Input optical power	-18dBm~0dBm
RF frequency	47MHz~1000MHz
RF output level	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

Network Application

Typical Solution: FTTH

Typical Business: INTERNET, CATV



Ordering Information

Product Name	Product Model	Descriptions
1GE+3FE+CATV single fiber	FD704X-AG-R410	1*10/100/1000M and 3*10/100M Ethernet interface, 1 GPON optical interface, 1 RF interface, built-in FWDM, Input optical power -18dBm~0dBm, support AGC function, plastic casing, external power supply adapter