

FD504X-X-R310 1GE+3FE Dual-Mode ONU



Brief Views

FD504X-X-R310 dual-mode ONU is one of the XPON optical network unit design to meet the requirement of the broadband access network. It apply in FTTH/FTTO to provide the data, video service based on the XPON network.

FD504X-X-R310 dual-mode ONU supports EPON and GPON two modes access. The ONU automatically switches into the corresponding PON mode by identifying the local OLT mode to complete GPON or EPON adaptive access.

FD504X-X-R310 have a high reliability and provide quality of service guarantee, easy management, flexible expansion and networking. It's fully meet the ITU-T and IEEE technical standards and have good compatibility with third party manufacturers OLT.

Functional Feature

Adaptive GPON mode:

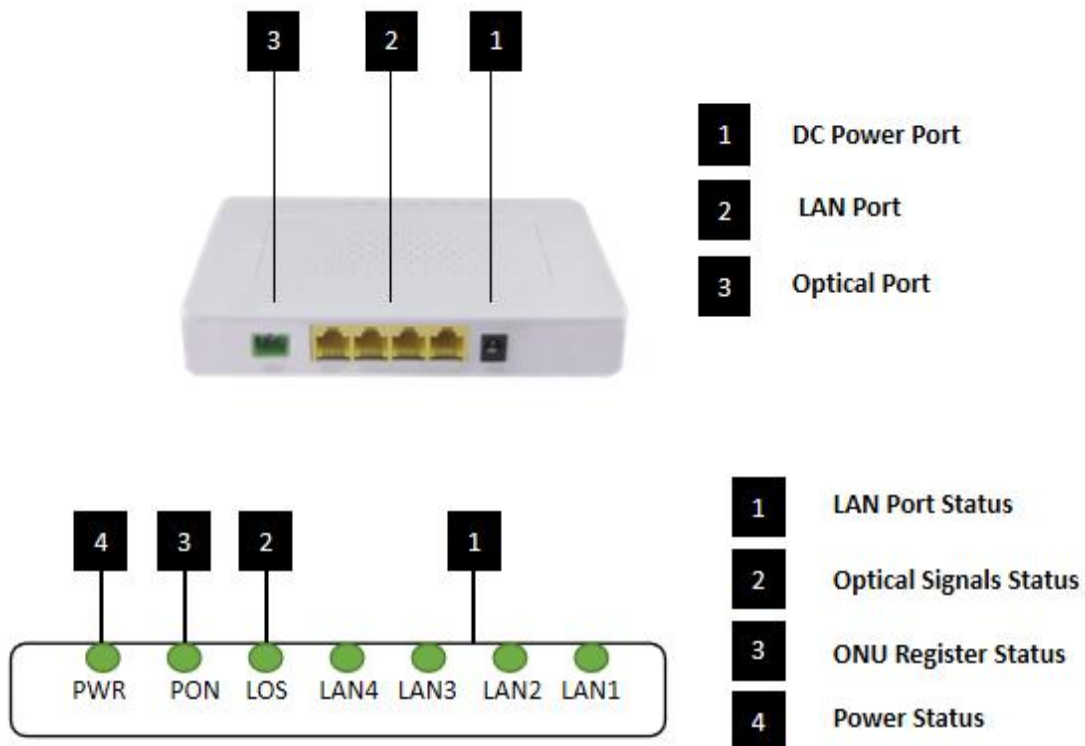
- In compliant with ITU - T G.984 Standard, adapting GPON upstream
- Support ONU auto-discovery/Link detection/remote upgrade of software;
- Support SN and LOID+Password multiple registration methods
- Support port VLAN configuration
- Support mac-address learning
- Support port-based rate limitation and bandwidth control;
- Support port isolate
- 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
- EMS network management based on SNMP ,convenient for maintenance
- Support power-off alarm function ,easy for link problem detection

Adaptive EPON mode:

- In compliant with IEEE802.3ah Standard
- Support ONU auto-discovery/Link detection/remote upgrade of software;
- Support MAC and LOID+Password multiple registration methods
- Support port VLAN configuration
- Support mac-address learning
- Support port-based rate limitation and bandwidth control;
- Support port isolate
- 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 Triple Churning algorithm encryption and decryption
- 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	XPON 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: In process of registering to OLT;
4	PWR	Power status	On: The ONU is power on; Off: The ONU is Power off;



Specification

Item	Parameter
PON Interface	GPON/EPON mode adaptive 1*GPON port, FSAN G.984.2 standard, support for backward compatibility with EPON SC/PC single mode fiber
User Ethernet Interface	1*10/100/1000 and 3*10/100M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
Power Interface	12V DC Power supply
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 s; Upstream 1.244Gbit/s Ethernet: 100Mbps or 1000Mbps Packet Loss Ratio: 1×10^{-12} latency: 1.5ms
Network Management	When adaptive to GPON mode, support standard compliant OMCI interface as defined by ITU-T G.984.4 and WEB and Telnet local management When adaptive to EPON mode, Support IEEE802.3 QAM, ONU can be remotely managed by OLT, WEB management, and Telnet local management
Management Function	Status monitor, Configuration management, Alarm management, Log management
Shell	Plastic casing
Power	4W 12V/0.5A power supply adapter

Physical Specifications	Item Dimension: 125mm(L) x80mm(W) x 25mm (H) Item weight: 0.2kg
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)

Network Application

Typical Solution: FTTH, FTTO

Typical Business: INTERNET, IPTV

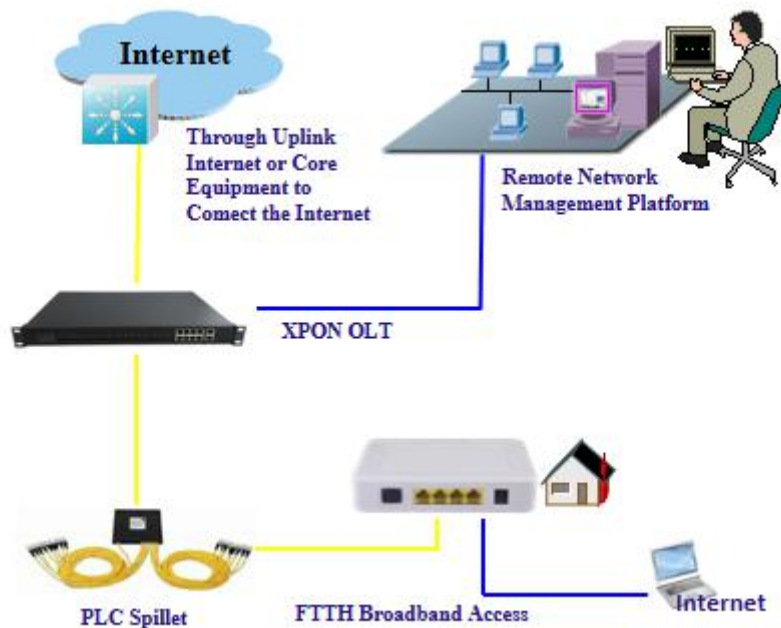


Figure: FD504X-X-R310 ONT Application Diagram

Ordering Information

Product Name	Product Model	Descriptions
1GE+3FE dual-mode ONU	FD504X-X-R310	1*10/100/1000M and 3*10/100M Ethernet interface, 1 EPON/GPON adaptive interface, plastic casing, external power supply adapter