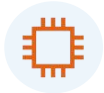# FD512XW-X-R460

1GE+1FE+WIFI XPON ONU

High Speed CPU

Low Power Consumption

Software Customization

Optional Shell Supply

Brief Views

FD512XW-X-R460 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.

FD512XW-X-R460 have a high reliability and provide quality of service guarantee, easy management, flexible expansion and networking. It fully meets the ITU-T and IEEE technical standards and have good compatibility with third party OLT.

FD512XW-X-R460 integrates wireless function which meets 802.11 b/g/n technical standards. It has two external high gain omnidirectional antennas, 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 IEEE802.3ah and ITU - T G.984 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/OMCI remote management

- Support data encryption and decryption function
- Support Dynamic Bandwidth Allocation (DBA)
- Support MAC filter and URL access control
- 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

WIFI

PowerON/OFF Button

PON Port   LAN Ports   Power Port

LOS

OPT-DIG

OPT-DIG

PWR   PON   INT   GE   FE   WIFI

LED Definitions

Indicator		Description
WIFI	WIFI	Blinking：Data is being transmitted On：WIFI function Open Off：WIFI function Close
FE	FE Port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
GE	GE Port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
LOS	PON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
PON	ONT Register	On: Success to register to OLT Blinking: In process of registering to OLT; Off: Failed to register to OLT or no normal optical signal input;;
PWR	Power status	On: The ONU is power on; Off: The ONU is Power off;
INT	Internet status indicator	On: The routed WAN Internet access service is normal. Off: The routed WAN Internet access service is abnormal.
OPT	Light intensity indicator	On: higher than ONU RX maximum threshold; Flashing: lower than ONU RX minimum threshold; Off: ONU RX is within the normal threshold range.

Hardware

- **GPON/EPON Port**
  - Single mode single fiber
  - GPON：FSAN G.984.2 standard,Class B+
  - EPON：1000BASE-PX20+ symmetric
  - GPON：2.488Gbps/1.244Gbps downstream/upstream
  - EPON：1.25Gbps downstream/upstream
  - Wavelength :
    Transmit: 1310nm   Receiver: 1490nm
  - Receiving sensitivity :
    GPON：-28dBm   EPON：-27dBm
  - Saturated power :
    GPON：-8dBm   EPON：-3dBm
  - Transmitting power :
    GPON：0.5～5dBm   EPON:0～4dBm

- **User Port(LAN)**
  - RJ-45 connector
  - 1*10/100 and1 *10/100/1000Mbps adaptive Ethernet port
  - Full/half duplex
  - Auto MDI/MDI-X
- **WIFI performance parameters**
  - IEEE802.11b/g/n(2.4G)
  - Max rate: 300M(2.4G)
  - Max TX power: 2.4G：17dBm
- **Indicators**
  - PWR / PON / LOS / GE / FE / WIFI / INT / OPT-DIG
- **Power**
  - External 12VDC/0.5A power supply adapter
  - Power consumption: <4W

● **Environmental Specifications**

➢ Operating temperature: 0 to 40° C

➢ Storage temperature: -40 to 85° C

➢ Operating humidity: 10% to 90%(Non-condensing)

Software

● **Management**

➢ EPON :OAM / WEB / TR069 / Telnet

➢ GPON:OMCI / WEB / TR069 / Telnet

● **L3**

➢ IPv4/IPv6 Dual Stack

➢ NAT

➢ DHCP client/server

➢ PPPOE client/ Pass through

➢ Static and dynamic routing

● **Switch**

➢ MAC address learning

➢ MAC address learning account limit

➢ Broadcast storm suppression

➢ VLAN transparent/tag/translate/trunk

● **Multicast**

➢ IGMP V2

➢ IGMP VLAN

➢ IGMP transparent/Snooping/Proxy

● **Wireless**

➢ SSID broadcast/ hide

➢ Choose channel automatically

● **Security**

➢ Firewall

➢ MAC address/URL filter

➢ Remote WEB/Telnet access control

● **Register**

➢ Auto-discovery/Link detection/Remote upgrade software

➢ Auto/MAC/SN/LOID+Password authentication

Application

➢ Typical Solution：FTTH

➢ Typical Business：Internet, Wi-Fi