

# Ultimate-1510

4GE+1POTS+2WIFI6 XPON ONU



## Product Overview

The Ultimate-1510 is a high-performance **Wi-Fi 6** XPON VoIP Gateway ONT designed to deliver ultra-fast, reliable connectivity. It supports dual-band wireless standards including IEEE 802.11a/b/g/n/ac/ax over both 2.4GHz and 5GHz frequencies, offering combined wireless speeds of up to 1500 Mbps.

Engineered for high reliability and seamless performance, the Ultimate-1510 ensures robust Quality of Service (QoS), simplified network management, and flexible scalability. It fully complies with ITU-T and IEEE technical standards and is compatible with a wide range of third-party OLTs, making it an ideal solution for modern FTTH deployments.



## Functional Feature

### 🌐 Industry Standards Compliance

- Adheres to IEEE 802.3ah and ITU-T G.984 standards, ensuring seamless integration and reliable performance in GPON networks.

### 🔧 Intelligent Network Management

- Supports automatic ONU discovery, link status monitoring, and remote firmware upgrades for simplified deployment and maintenance.
- Integrated EMS management via SNMP for centralized, efficient network supervision.
- Enables remote access control through intuitive Web GUI and Telnet interfaces.
- Power failure alarm functionality for rapid fault identification and resolution.

### 🔒 Robust Security Features

- Implements AES encryption/decryption to ensure secure data transmission.
- Built-in firewall with MAC address and URL filtering for enhanced network protection.
- Supports multiple ONU authentication methods including Serial Number (SN) and LOID + Password.

### 📶 Triple-Play Service Delivery

- Provides single-fiber access supporting Internet, VoIP, and Wi-Fi services.
- Equipped with Wi-Fi 6 technology, supporting 802.11a/b/g/n/ac/ax standards for faster speeds, greater capacity, and improved wireless efficiency.
- Utilizes Dynamic Bandwidth Allocation (DBA) to optimize bandwidth distribution based on real-time demand.

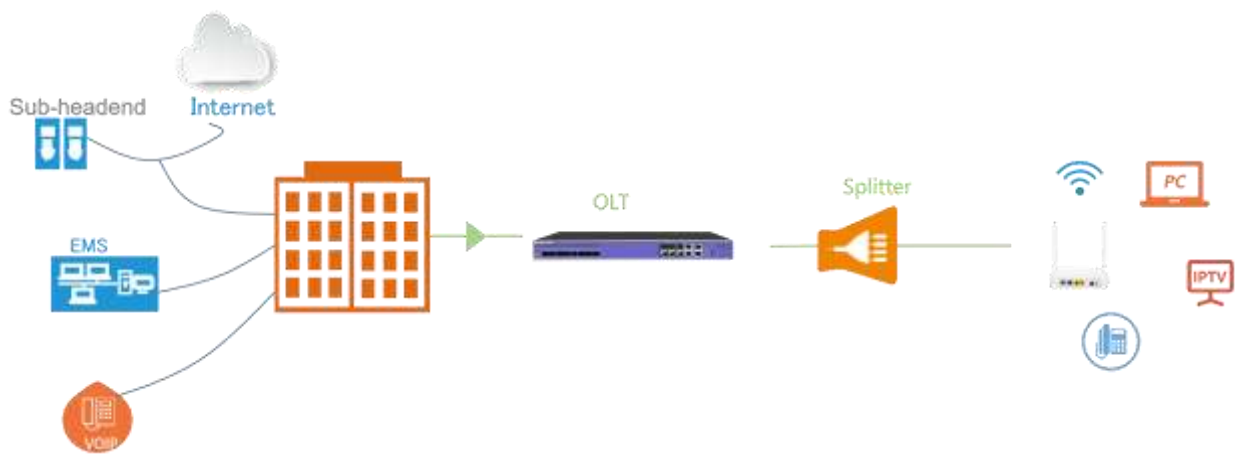
### ⚙️ Advanced Port & Traffic Control

- Offers port-based VLAN configuration, rate limiting, and bandwidth control for precise traffic management.
- Supports MAC address learning with configurable limits to enhance security and performance.
- Comprehensive VLAN modes including transparent, tagged, translation, and trunk configurations.

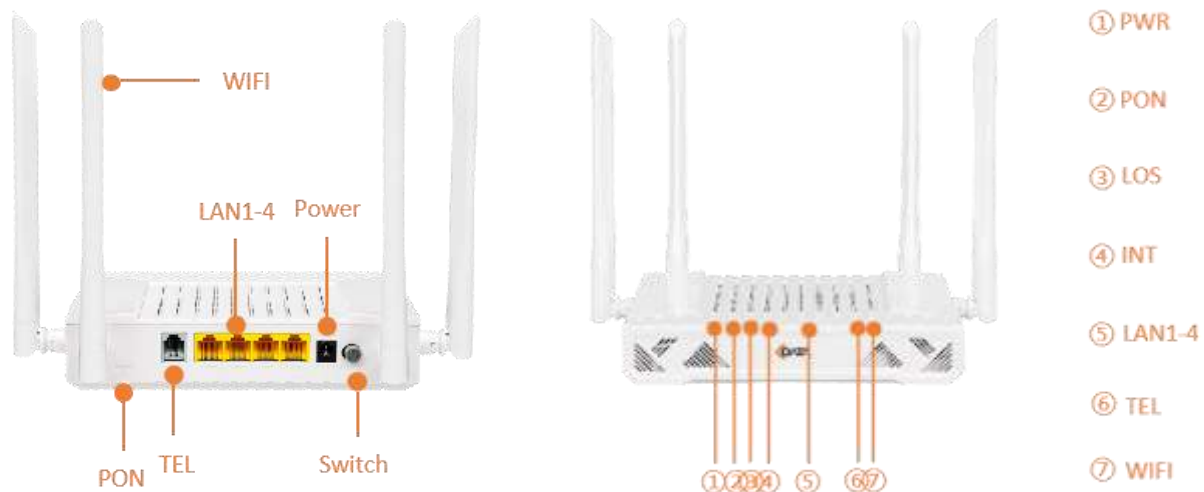
### 📺 Multicast & Broadcast Efficiency

- Supports IGMP in transparent, snooping, and proxy modes for efficient multicast traffic handling.
- Equipped with broadcast storm control to maintain network stability and prevent congestion.





## Product Interface and LED



Indicator		Description
PWR	Power status	On: The ONT is power on;
		Off: The ONT is Power off;
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;
LOS	PON optical signals	On: Optical power lower than receiver sensitivity;
		Off: Optical in normal;
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;
INT	Internet status indicator	On: The routed WAN Internet access service is normal.
		Off: The routed WAN Internet access service is abnormal.

## Product Specification

Mechanics	
Dimensions	170mm*120mm*41mm
Weight	About 300g
Hardware	
User Port (LAN)	RJ-45 connector
	4 *10/100/1000Mbps adaptive Ethernet port
	Full/half duplex
	Auto MDI/MDI-X
Indicators	PWR / PON / LOS / GE / FE / INT / TEL / WIFI
PON Port	PON Mode
	EPON : 1000BASE-PX20+ symmetric GPON : FSAN G.984.2 standard, Class B+
	PON Rate
	EPON : 1.25Gbps downstream/upstream GPON : 2.488Gbps/1.244Gbps downstream/upstream
	Wavelength
	Transmit: 1310nm Receiver: 1490nm
	Receiving sensitivity
	EPON : -27dBm GPON : -28dBm
	Saturated power
	EPON : -3dBm GPON : -8dBm
	Transmitting power
	EPON:0~4dBm GPON : 0.5~5dBm
WIFI	
IEEE802.11b/g/n/ax(2.4G)	
IEEE802.11a/n/ac/ax(5G)	
2.4G: 40Mhz bandwidth maximum rate 300Mbps 5G: 80Mhz bandwidth maximum rate 1201Mbps Total wireless rate is 1500Mbps	
2.4G EIRP:24dBm / 5 G EIRP:22dBm	
Environment	
Working temperature	0 to 40° C
Operating humidity	10% ~ 90% (Non-condensing)
User Port (POTS)	
RJ-11 connector	
1*accounts	
SIP protocol	
TDMF	
G711U/G711A/G729/G722 encoding and decoding	
Power	
External 12VDC/1A power supply adapter	
Power consumption	<18W

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