

# Ultimate-1510

4GE+1POTS+2WIFI6 GPON ONU



## Product Overview

The Ultimate-1510 is a high-performance **Wi-Fi 6** GPON 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 3000 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

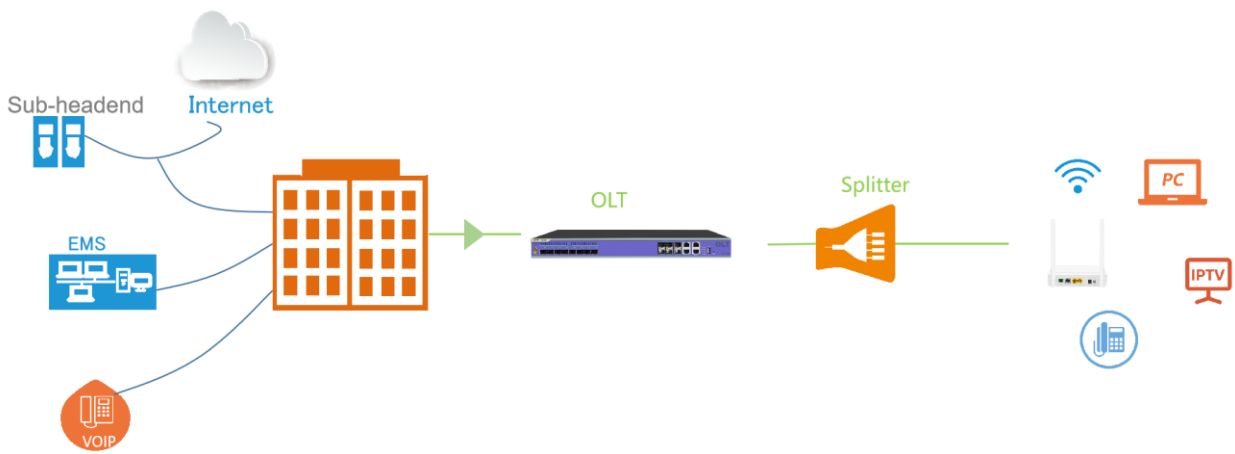
- Provides single-fiber access supporting Internet, VoIP, and Wi-Fi services.
- Equipped with Wi-Fi 6 technology, supporting 802.11a/b/g/n/ac/ax standards for faster speeds, greater capacity, and improved wireless efficiency.
- Utilizes Dynamic Bandwidth Allocation (DBA) to optimize bandwidth distribution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

### ⚙️ Advanced Port & Traffic Control

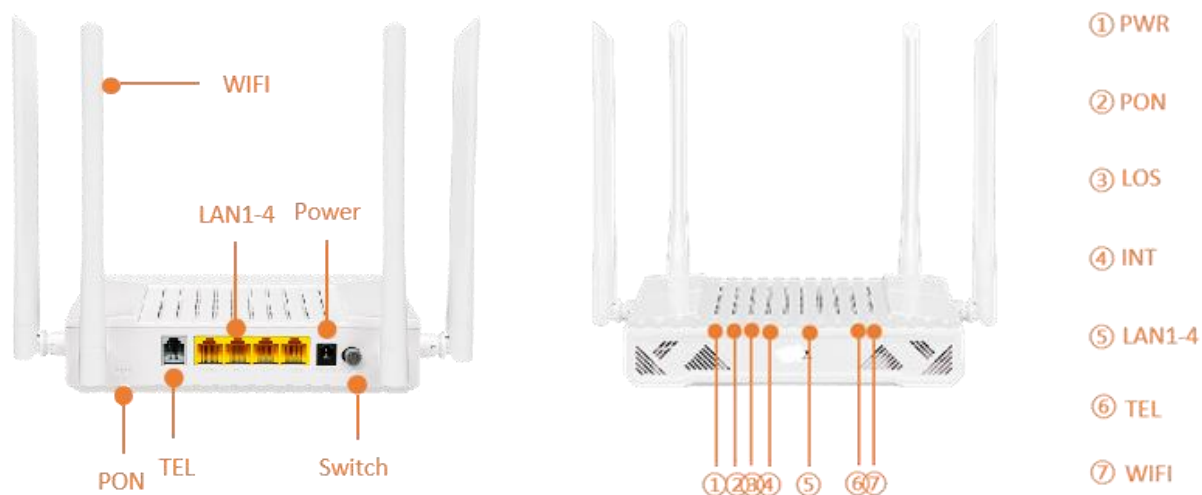
- Offers port-based VLAN configuration, rate limiting, and bandwidth control for precise traffic management.
- Supports MAC address learning with configurable limits to enhance security and performance.
- Comprehensive VLAN modes including transparent, tagged, translation, and trunk configurations.

### 📺 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	200mm*125mm*36mm	
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	GPON : FSAN G.984.X standard, Class B+
	PON Rate	GPON : 2.488Gbps/1.244Gbps downstream/upstream
	Wavelength	Transmit: 1310nm Receiver: 1490nm
	Receiving sensitivity	GPON : -28dBm
	Saturated power	GPON : -8dBm
	Transmitting power	GPON : 0.5~5dBm
	WIFI	
IEEE802.11b/g/n/ax(2.4G)		
IEEE802.11a/n/ac/ax(5G)		
2.4G: 40Mhz bandwidth maximum rate 574Mbps 5G: 160Mhz bandwidth maximum rate 2402Mbps Total wireless rate is 3000Mbps		
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/1.5A power supply adapter		
Power consumption	<18W	

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