

## ONU400W SFU Type EPON ONU Built-in WiFi



### Brief Views

GEPON ONU400W, is designed mainly for FTTH use and FTTO use as well. GEPON ONU400W support 1000Base-PX10/PX20 standard with 1:64/1:32 maximum optical splitting ratio and 10/20km distance, and provide 1uplink GE PON port.

ONU400W could realize flexible network structure and maintenance and provide total FTTx solutions. ONU400W adopts single fiber WDM technology with downlink wavelength 1490nm and uplink wavelength 1310nm .It only needs one-core fiber to transmit data service.

ONU400W has 1 PON port ,4 10/100BASE-T ports and support WiFi.  
Perfectly matched with our OLT1000 Series .

### Functional Feature

Support port-based rate limitation and bandwidth control;

In compliant with IEEE802.3ah Standard

Up to 20KM transmission Distance

- Support data encryption, group broadcasting, port Vlan separation ,RSTP,etc.
- Support Dynamic Bandwidth Allocation (DBA)
- Support ONU auto-discovery/Link detection/remote upgrade of software;
- Support VLAN division and user separation to avoid broadcast storm;
- Support power-off alarm function ,easy for link problem detection
- Support broadcasting storm resistance function
- Support port isolation between different ports
- Support ACL and SNMP to configure data packet filter flexibly
- Specialized design for system breakdown prevention to maintain stable system
- Support software online upgrading
- EMS network management based on SNMP ,convenient for maintenance

## Specification

Item	Parameter
PON Interface	1G EPON optical interface Meet 100BASE-PX20 standard Symmetric 1.25Gbps upstream/downstream SC single-mode fiber split ratio: 1:64 Transmission distance 20KM
User Ethernet Interface	4*10/100M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
Power Interface	12V DC Power supply An external 12V 0.5A AC/DC power supply adapter
PON Optical Parameter	Wavelength: Tx 1310nm, Rx 1490nm Tx Optical Power: -1~4dBm Rx Sensitivity: -24dBm Saturation Optical Power: -3dBm Connector Type: SC Optical Fiber: 9/125µm single-mode fiber
Data Transmission Parameter	PON Throughput: Downstream 950Mbps; Upstream 930Mbps Ethernet: 100Mbps (FD101H、FD104H) , 1000Mbps (FD112H) Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Business Capability	Layer 2 wire speed switching Support VLAN TAG/UNTAG, VLAN conversion Support Port-based speed limitation Support Priority classification Support storm control of broadcast Support RSTP
Network Management	Support IEEE802.3 QAM, ONU can be remotely managed by OLT Support Remote management through SNMP and Telnet Local management
Management Function	Status monitor, Configuration management, Alarm management, Log management
LED Indicator	PWR: Power up or down OPTIN: Optical Link Status LINK: ONU Registered ETH: Link Status of Ethernet Interface LAN: Link Status of Ethernet Interface

# ONU400W



	WIFI: WIFI status
Shell	Plastic casing
Power	External 12V 0.5A AC/DC power supply adapter Power consumption: < 3.8W
Physical Specifications	Item Dimension: 160mm(L) x 120mm(W) x 30mm (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: 5% to 95%(Non-condensing)

## WIFI Specification

<b>Performance parameters</b>	Operating Mode	Router or bridge
	Throughput	IEEE 802.11b: 11Mbps IEEE 802.11g: 54 Mbps IEEE 802.11n: 135Mbps
	Frequency	2.412 ~ 2.472 GHz
	Channel	13*Channel, configurable to meet the standard of USA, CCanada, Japan and China
	Modulation	DSSS , CCK and OFDM
	Coding	BPSK, QPSK, 16QAM and 64QAM
	RF receive sensitivity	802.11b: -82dBm @ 1 Mbps; -80dBm @ 2 Mbps; -78dBm @ 5.5 Mbps; -76dBm @ 11 Mbps 802.11g: -82dBm @ 6 Mbps; -81dBm @ 9 Mbps; -79dBm @ 12 Mbps; -77dBm @ 18 Mbps; -74dBm @ 24 Mbps; -70dBm @ 36 Mbps; -66dBm @ 48 Mbps; -65dBm @ 54 Mbps
	RF output lever	802.11b: 16.5 ±1dBm 802.11g: 13 ± 1dBm @ 54 Mbps; 14 ± 1dBm @ 48 Mbps; 15 ± 1dBm @ 6 ~ 36 Mbps 802.11n: 13 ± 1dBm @ 54 Mbps; 14 ± 1dBm @ 48 Mbps; 15 ± 1dBm @ 6 ~ 36 Mbps
Encryption Mode	802.11i security: WEP-64/128, TKIP (WPA-PSK) and AES (WPA2-PSK)	

## Application

Typical Solution: FTTx、PON+EOC

Typical Business: INTERNET、IPTV、VOD、IP Camera、WIFI

## Network Construction



**Figure: ONU400W Application Diagram**