



## SPU-GE420W-H

### 4GE+WIFI Dual-Mode ONU



#### Brief Views

SPU-GE420W-H 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.

SPU-GE420W-H have a high reliability and provide quality of service guarantee, easy management, flexible expansion and networking. It's fully meet the ITU-T technical standards and have good compatibility with third party manufacturers OLT.

SPU-GE420W-H can integration wireless function with meet 802.11 n/b/g technical standards, It has external high gain directional antenna, 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.

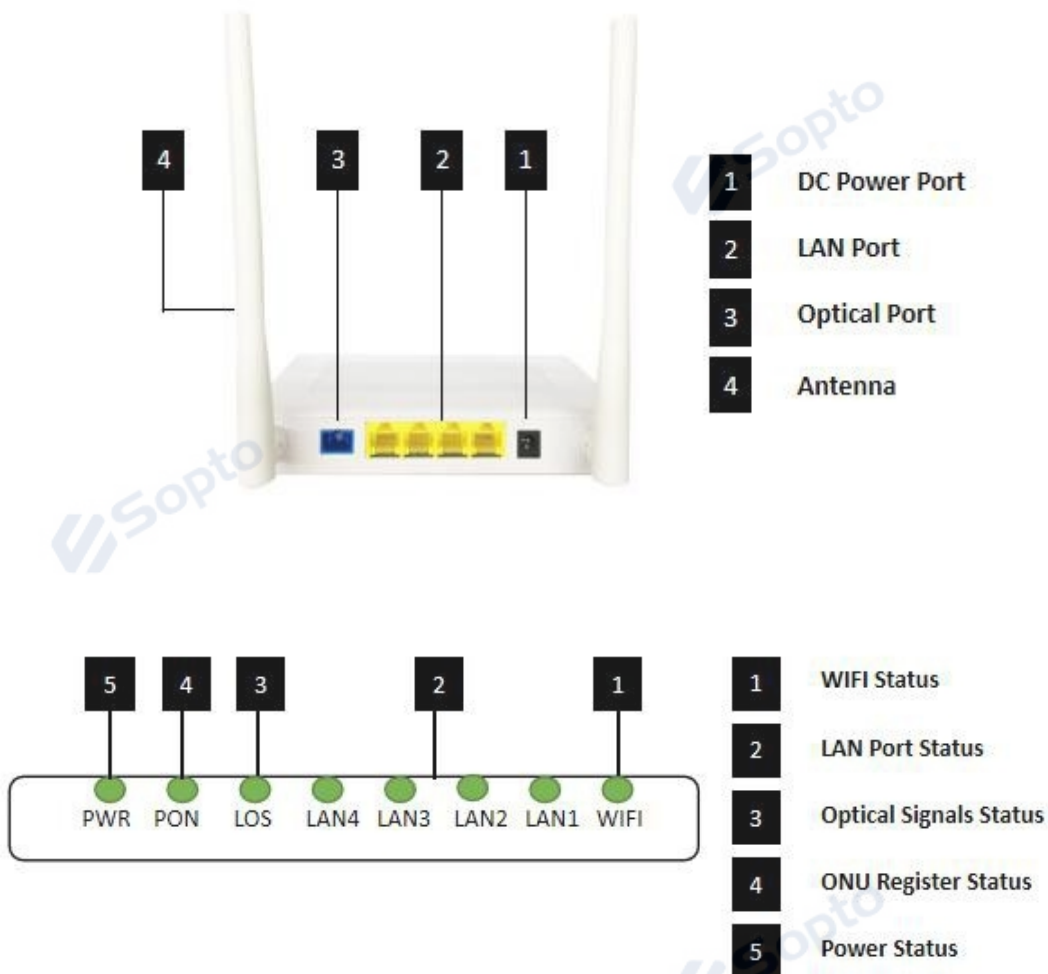
#### Features

- 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+TR069 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 Definitions



Indicator	Description
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1	WIFI	WIFI	Blinking: Data is being transmitted On: Wi-Fi function Open Off: Wi-Fi function Close
2	LAN	LAN Port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
3	LOS	PON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
4	PON	ONT Register	On: Success to register to OLT Blinking: In process of registering to OLT; Off: In process of registering to OLT;
5	PWR	Power status	On: The ONU is power on; Off: The ONU is Power off;

**Specification**

Item		Parameter
<b>Interface</b>	EPON/GPON Interface	SC/UPC 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
	Ethernet Interface	4*10/100/1000M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
	Power Interface	12V DC Power supply
<b>Network Management</b>	Management Mode	OMCI, OAM, TR069, WEB, Telnet
	Management Function	Status monitor, Configuration management, Alarm management, Log management
	Power	External 12V DC/1A power supply adapter Power consumption: <7W



	Physical Specifications	Item Dimension 160mm(L)*139.5mm(W)*28.5mm(H) Item Net Weight : about 228g
	Environmental Specifications	Operating temperature: 0 to 40°C Operating humidity: 10% to 90%(Non-condensing)

**WIFI Specification**

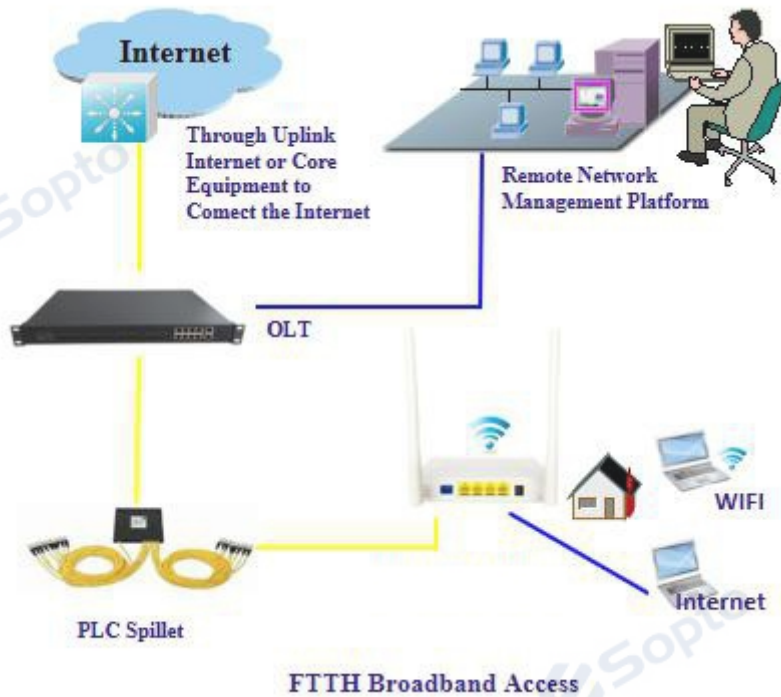
Item	Parameter	
Performance parameters	Operating Mode	Router or bridge
	Antenna gain	5dBi
	WIFI antenna	2 external antennas
	Throughput	IEEE 802.11b: 11Mbps IEEE 802.11g: 54 Mbps IEEE 802.11n: 300Mbps
	Frequency	2.412 ~ 2.472 GHz
	Channel	13*Channel, configurable to meet the standard of USA,Canada, Japan and China
	Modulation	DSSS , CCK and OFDM
	Coding	BPSK, QPSK, 16QAM and 64QAM
	Receive sensitivity	802.11b: -83dBm @ 1 Mbps;    -79dBm @ 5.5 Mbps; -76dBm @ 11 Mbps 802.11g: -85dBm @ 6 Mbps;    -77dBm @ 24 Mbps; -68dBm @ 54 Mbps; 802.11n HT20 : -85dBm @ MCS0;    -73dBm @ MCS4; -67dBm @ MCS7 802.11n HT40 : -82dBm @ MCS0;    -70dBm @ MCS4; -64dBm @ MCS7

Output power		802.11b: 19 ± 1dBm @ 1 Mbps      19±1dBm @ 5.5 Mbps; 18 ±1dBm @ 11 Mbps; 802.11g: 18 ± 1dBm @ 6 Mbps      17±1dBm @ 24 Mbps; 16 ±1dBm @ 54 Mbps; 802.11n    HT20: 17 ± 1dBm @ MCS0; 16 ± 1dBm @ MCS4 ; 15 ± 1dBm @ MCS7 802.11n    HT40: 17 ± 1dBm @ MCS0; 16 ± 1dBm @ MCS4 ; 15 ± 1dBm @ MCS7
Encryption Mode		802.11i security: WEP-64/128, TKIP (WPA-PSK) and AES(WPA2-PSK)

## Application

Typical Solution: FTTH

Typical Business: INTERNET, WIFI



## Ordering Information



Part Number	Product Description
SPU-GE420W-H	G/EPON ONU , 4 *10/100/1000M UTP Ports, with 2.4GHz WIFI

Note:

1、 Default operating case temperature is 0 ~ 70°C. If you need -40 ~85°C products, add “T” after Part Number .

2、 If you need more customized services, please contact us.

E-mail: [info@sopto.com.cn](mailto:info@sopto.com.cn)

Web : <http://www.sopto.com.cn>

