



# SPU-G420WD-HZ



#### **Overview**

SPU-G420WD-HZ dual-frequency data type ONU is one of the GPON optical network unit design to meet the requirement of the broadband access network. It apply in FTTH/FTTO to provide the data, video service based on the GPON network.

GPON is the latest generations of access network technology. ITU-T G.984 is the standard protocol of GPON. The GPON standard differs from other PON standards in that it achieves higher bandwidth and higher efficiency using larger, variable-length packets. GPON offers efficient packaging of user traffic, with frame segmentation allowing higher quality of service (QOS) for delay-sensitive video communications traffic. GPON networks provides the reliability and performance expected for business services and provides an attractive way to deliver residential services. GPON enables Fiber To The Home (FTTH) deployments economically resulting to accelerated growth worldwide.

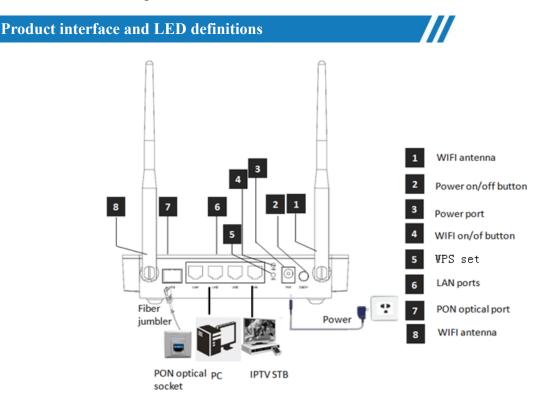
SPU-G420WD-HZ have a high reliability and provide quality of service guarantee, easy management, flexible expansion and networking. It's fully meet the ITU-T technical standards and have good compatibility with third party manufacturers OLT.

SPU-G420WD-HZ can integration wireless function with meet 802.11 a/b/g/n/ac technical standards. At the same time, it also supports 2.4GHz/5GHz dual-band wireless signal. It has the characteristics of

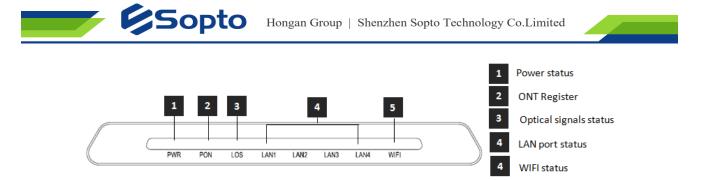
strong penetrating power and wide coverage. It can provide users with more efficient data transmission security.

### Features

- In compliant with ITU T G.984.1/2/3/4 standard
- Meet 802.11 a/b/g/n/ac WIFI technical standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Support Ethernet line performance statistics function
- Support OMCI+TR069 management mode
- Support VLAN tag/untag
- Support multicast Snooping/Proxy
- Support DHCP/PPPOE/Static IP internet mode
- Support port binding
- Support loop-detection function
- Support device-based speed limitation
- Support MAC-address filter and URL access control
- Support AES encryption and decryption
- Support Dynamic Bandwidth Allocation (DBA)
- Support ACL configure data packet filter flexibly
- EMS network management based on SNMP , convenient for maintenance



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Indicator			Description
1	PWR	Power status	On: The ONU is power on; Off: The ONU is Power off;
2	PON	ONU Register	On: Success to register to OLT Blinking: In process of registering to OLT; Off: In process of registering to OLT;
3	LOS	GPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
4	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;
5	WIFI	WIFI	Blinking : Data is being transmitted On : Wi-Fi function Opens Off : Wi-Fi function Close

## Specification

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Item		Parameter
Interface	PON Interface	1*GPON port, FSAN G.984.2 standard, Class B+ Downstream Data Rate: 2.488Gbps Upstream Data Rate: 1.244Gbps SC/PC single mode fiber 28dB Link loss and 20KM distance with 1:128
	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
Performance Parameters	PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0.5~5dBm Rx Sensitivity: -28dBm Saturation Optical Power: -8dBm
	Data	PON Throughput: Downstream 2.488Gbit/s s; Upstream

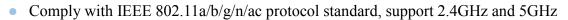
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	Transmission	1.244Gbit/s
	Parameter	Ethernet: 1000Mbps Packet Loss Ratio: <1*10E-12
		latency: <1.5ms
Network Management	Management Mode	Standard compliant OMCI interface as defined by ITU-T G.984.4 Support TR069 and WEB management
	Management Function	Status monitor, Configuration management, Alarm management, Log management
	Shell	White plastic casing
	Power	External 12V DC/1A power supply adapter Power consumption: <7.5W
Physical Features	Physical Specifications	Item Dimension: 160mm(L) x 120mm(W) x 32.5mm (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: 10% to 90%(Non-condensing)

## **WIFI Features**

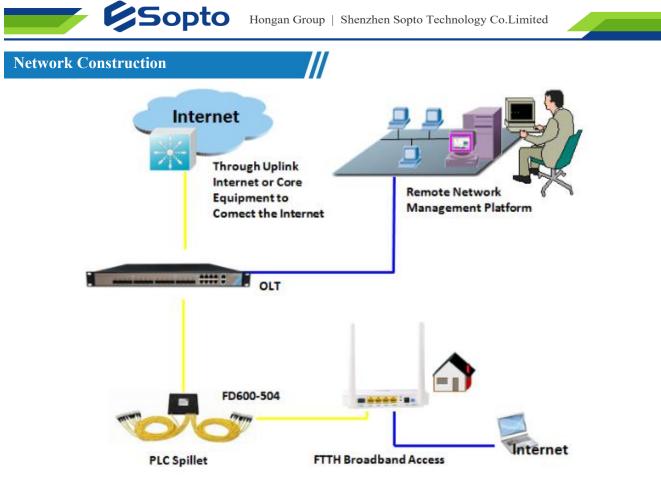


- There are four antennas, two built-in, two external
- 5dBi antenna gain
- Maximum ideal rate up to 1.2Gbps
- 2.4GHz supports 2\*2 MIMO (Multiple-Input Multiple-Output) technology
- 5GHz supports 2\*2 MIMO (Multiple-Input Multiple-Output) technology
- Support 8 SSIDs
- Support wider RF bandwidth, up to 80MHz
- Support higher 256-QAM modulation mode
- Support MIMO-OFDM encoding mode
- Support wireless security of 64/128 bit WEP、802.1x、WPA and WPA2

## Application

- Typical Solution : FTTH
- Typical Business : INTERNET, WIFI





**Figure: Application Diagram** 

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Product Name	Product Model	Descriptions
GPON HGU	SPU-G420WD-HZ	ONU GPON 4 UTP Ports 10/100/1000M with 2.4GHz and 5GHz WIFI with External 220V AC to 12V DC power supply adapter Commercial temperature Plastic housing ZTE chipset

Note: If you need more customized services, please contact us.

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