



### **CATV Type WIFI Dual-Mode ONU**



### **Brief Views**

SPU-GE2300BW-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-GE2300BW-H is fiber to the home multiple service access XPON ONT. It's based on the mature, stable, high cost performance XPON technology, gigabit Ethernet switching, WDM and HFC technology. It has a higher bandwidth, higher reliability, easy management and good quality of service (QoS) guarantee. It fully meets the ITU-T and IEEE technical standards and have good compatibility with third party OLT.

It adopts single fiber WDM technology with downlink wavelength 1550nm and 1490nm, uplink wavelength 1310nm. It only needs one-core fiber to transmit data and CATV service.

SPU-GE2300BW-H integrates wireless function which meets 802.11 b/g/n technical standards. It has two external high gain omnidirectional antennas, 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.

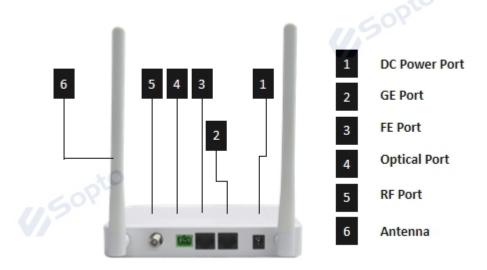
#### **Features**

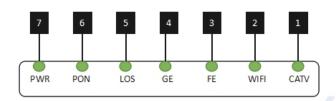
- Single-fiber access, provides internet, CATV, WIFImultiple service
- In compliant with IEEE802.3ah and ITU T G.984 standard
- Support ONU auto-discovery/Link detection/remote upgrade of software



- 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 remote CATV port management
- 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**





CATV Status

WIFI Status

FE Port Status

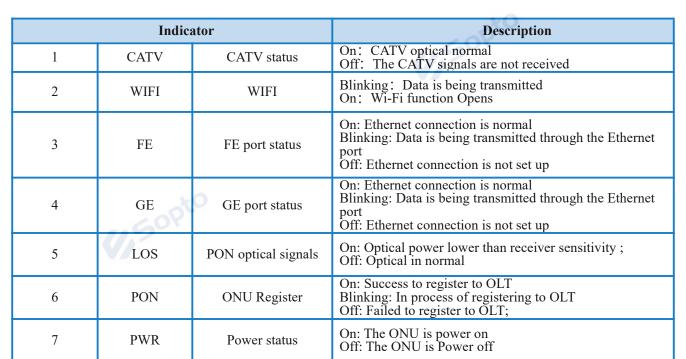
GE Port Status

Optical Signals Status

ONU Register Status

7 Power Status





### **Specification**

Item		Parameter
Interface	EPON/GPON Interface	SC/APC 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
	CATV Interface	1 RF output
		F-Type Connector
	Ethernet Interface	1*10/100/1000M and 1*10/100M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
	Power Interface	12V DC Power supply
Network	Management Mode	OMCI, OAM, TR069, WEB, Telnet

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# Shenzhen Sopto Technology Co. Limited

	Management Function	Status monitor, Configuration management, Alarm management, Log management
Physical Features	Power	<8.5W, 12V/1A power supply adapter
	Physical Specifications	Item Dimension: 160mm(L)*139.5mm(W)*28.5mm(H) Item Net Weight: about 231g
	Environmental Specifications	Operating temperature: 0 to 40°C Operating humidity: 10% to 90%(Non-condensing)

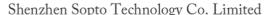
# CATV

Item	Parameter
Wavelength	1550nm
Optical return loss	>45dB
CATV optical port input power	-15dBm∼+2dBm
RF frequency	47MHz~1000MHz
RF output level	≥65dBuV (@-12dBm@85MHz)
RF flatness	<±1.5db
CNR	≥42dB (@-10dBm@DS22 Channel)
CSO	≤-60dBc (@-10dBm@DS22 Channel)
СТВ	≤-65dBc (@-10dBm@DS22 Channel)
RF output return loss	>10dB
RF output impedance	$75\Omega$

## **WIFI Specification**

Item		Parameter
<b>(</b> /)	Operating mode	Router or bridge
	Technical standard	IEEE802.11b/g/n
	Frequency	2.412 ~ 2.472 GHz
	Antenna gain	5dBi
	Support rate	802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 24, 36, 48, 54Mbps 802.11n: max rate 300Mbps
Performance	Channel	2.4GHz Channel: 1,2,3,4,5,6,7,8,9,10,11,12,13
parameters	Modulation mode	11b: DSSS: DBPSK(1Mbps),DQPSK(2Mbps),CCK(5.5/11Mbps) 11g: OFDM:BPSK(6/9Mbps), QPSK(12/18Mbps),16QAM(24/36Mbps) Q64QAM(48/54Mbps) 11n: MIMO-OFDM:BPSK,QPSK,16QAM,64QAM
	Receive sensitivity	11Mbps:≤-90dBm 54 Mbps:≤-76dBm



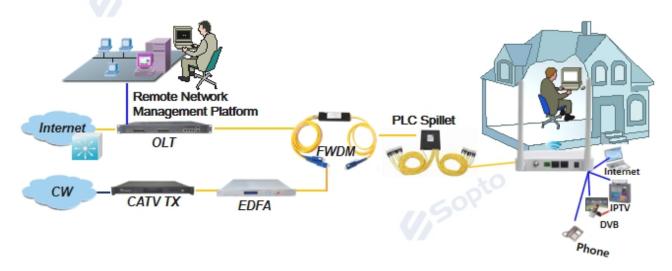


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	HT20 MCS7:≤-73dBm HT40 MCS7:≤-70dBm
Transmit power	802.11n: 17dBm
Encryption mode	AES, TKIP, WPA, WPA2, WPA-PSK/WPA2-PSK

## **Application**

Solution: FTTH

Business: INTERNET, WIFI, CATV



**Application Diagram** 

### **Ordering Information**

Part Number	Product Description
SPU-GE2300BW-H	G/EPON ONU , 1*10/100/1000M and 1*10/100M Ethernet interface, 1 CATV, supp ort 2.4GHz WiFi

#### Note:

1. Default operating case temperature is  $0 \sim 70$ °C.

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

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