

#### FD511GW-X-R310 1GE+WIFI Dual-Mode ONU



### 🖶 Brief Views

FD511GW-X-R310 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.

FD511GW-X-R310 have a high reliability and provide quality of service guarantee, easy management, flexible expansion and networking. It fully meets the ITU-T and IEEE technical standards and have good compatibility with third party OLT.

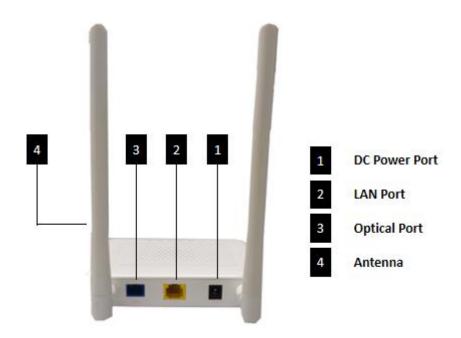
FD511GW-X-R310 integrates wireless function which meets 802.11 b/g/n technical standards. It has two external high gain omnidirectional antennas, the wireless transmission rate up to 300Mbps. It has the characteristics of strong penetrating power and wide coverage. It can provide users with more efficient data transmission security.



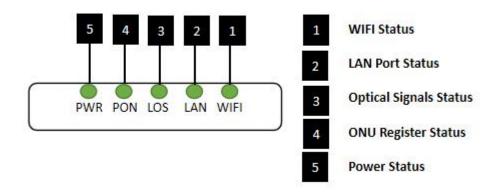
#### 🖶 Functional Feature

- 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
1	WIFI	WIFI	Blinking: Data is being transmitted On: WIFI function Open Off: WIFI 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
Interface	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	1*10/100/1000M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance



	Power Interface	12V DC Power supply	
	Management	OMCI, OAM, TR069, WEB, Telnet	
Network	Mode		
Management	Management	Status monitor, Configuration management, Alarm	
	Function	management, Log management	
	Power	<4W, 12V/0.5A power supply adapter	
Dhysical	Physical	Item Dimension: 228mm(L) x108mm(W) x 28mm (H)	
Physical Features	Specifications	Item Net Weight: about 136g	
reatures	Environmental	Operating temperature: 0 to 40° C	
	Specifications	Operating humidity: 10% to 90%(Non-condensing)	

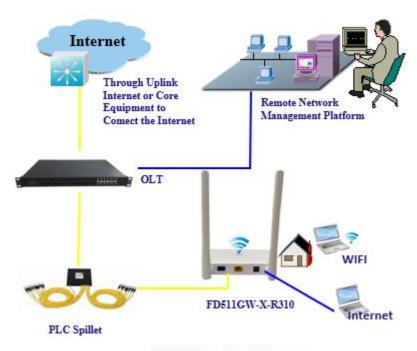
# **WIFI** Specification

ltem		Parameter
	Operating Mode	Router or bridge
	Technical standard	IEEE802.11b/g/n
	Frequency	2.412 ~ 2.472 GHz
	Antenna gain	5dBi
		802.11b: 1, 2, 5.5, 11Mbps
	Support rate	802.11g: 6, 9, 12, 24, 36, 48, 54Mbps
		802.11n: max rate 300Mbps
	Channel	2.4GHz Channel: 1,2,3,4,5,6,7,8,9,10,11,12,13
	Modulation mode	11b: DSSS:
Performance		DBPSK(1Mbps),DQPSK(2Mbps),CCK(5.5/11Mbps)
parameters		11g: OFDM:BPSK(6/9Mbps),
		QPSK(12/18Mbps),16QAM(24/36Mbps)
		Q64QAM(48/54Mbps)
		11n: MIMO-OFDM:BPSK,QPSK,16QAM,64QAM
		11Mbps:≤-90dBm
	Receive sensitivity	54 Mbps:≤-76dBm
		HT20 MCS7:≤-73dBm
		HT40 MCS7:≤-70dBm
	Transmit power	802.11n: 17dBm
	Encryption mode	AES, TKIP, WPA, WPA2, WPA-PSK/WPA2-PSK

### Network Application

Typical Solution: FTTH

Typical Business: INTERNET, WIFII



FTTH Broadband Access

# Ordering Information

Product Name	Product Model	Descriptions
1GE+WIFI	FD511GW-X-R310	1*10/100/1000M Ethernet interface, 1 EPON/GPON adaptive interface, support 300Mpbs WIFI, plastic
		casing, external power supply adapter