

FD511GW-E-R310 Pure Data Type WIFI ONU



Brief Views

FD511GW-E-R310 is C-Data's for broadband access market based on the introduction of EPON technology passive optical network terminal products. It's with EPON OLT are used together to provide a complete broadband access solution.

EPON technology is a kind of emerging technology which takes advantage of PON technology and Ethernet technology also is a kind of point to multi-point network technology. OLT through the passive optical network to connect multiple ONU with single fiber bidirectional technical can rarely used fiber resources to meet the operators of the multi-user access requirements.

FD511GW-E-R310 series fully meet IEEE802.3ah and CTC3.0 standard protocol. It has good third-party compatibility to work with the third party OLT, It supports 1Gbps transmission rate up and down and provides users with good QOS, flexible bandwidth allocation of Ethernet services and IP integrated service.

FD511GW-E-R310 series can integration wireless function with meet 802.11 n/b/g technical standards, It has two external 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.

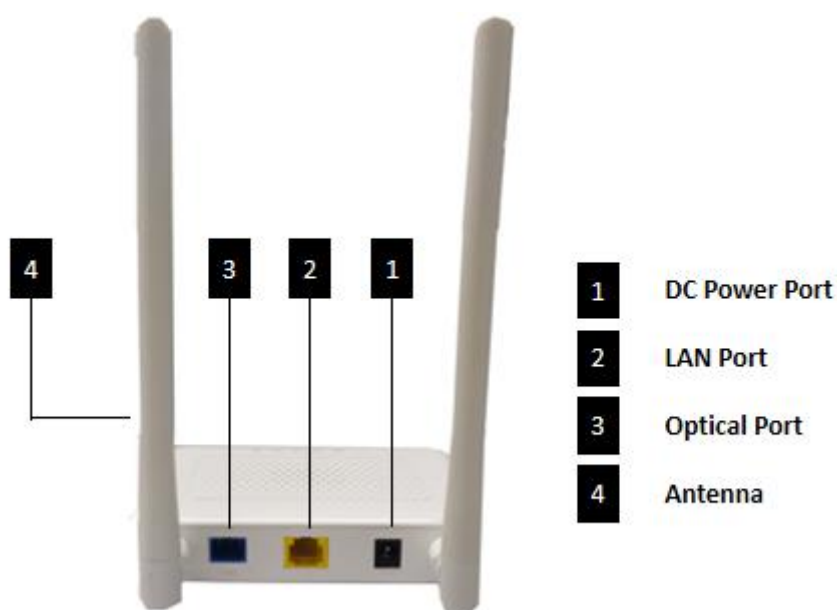
The device shell adopts personalized ventilation design, simple, fashion, steady. High quality environmental protection material is impact resistant, high temperature resistant and good

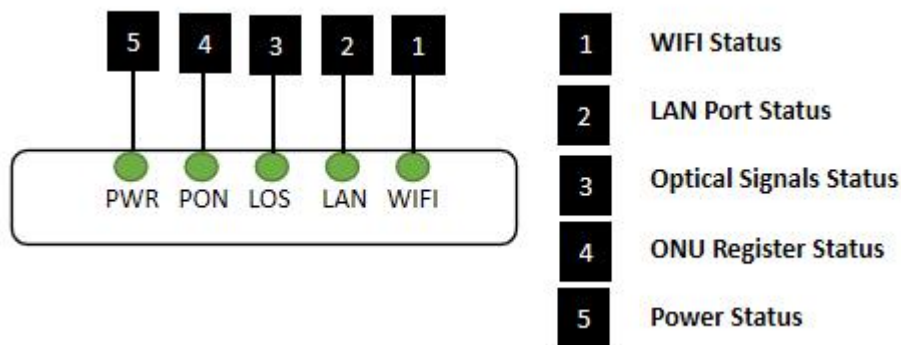
heat dissipation effect to providing users with a more secure Internet environment.

Functional Feature

- In compliant with IEEE802.3ah Standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Wi-Fi series meet 802.11 n/b/g technical standards
- Support VLAN transparent, tag configuration
- Support multicast function
- Support DHCP/Static/PPPOE internet mode
- Support port-binding
- Support OAM+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: 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	EPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
4	PON	ONU 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	PON Interface	1 EPON optical interface Meet 1000BASE-PX20+ standard Symmetric 1.25Gbps upstream/downstream SC/PC single-mode fiber split ratio: 1:64 Transmission distance 20KM
	Ethernet Interface	1*10/100/1000M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
	Power Interface	An external 12V DC 0.5A power supply adapter
Performance Parameters	PON Optical Parameter	Wavelength: Tx:1310nm, Rx:1490nm Tx Optical Power: 0~4dBm Rx Sensitivity: -27dBm Saturation Optical Power: -3dBm

	Data Transmission Parameter	PON Throughput: Downstream 980Mbps; Upstream 950Mbps Ethernet: 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Network Management	Management Mode	Support IEEE802.3 QAM, ONU can be remotely managed by OLT, support TR069 remote management and WEB management
	Management Function	Status monitor, Configuration management, Alarm management, Log management
Physical Features	Shell	White plastic casing
	Power	<4W, 12V/0.5A power supply adapter
	Physical Specifications	Item Dimension: 125mm(L) x80mm(W) x 28mm (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 Specification

	Item	Parameter
Performance parameters	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
	Channel	2.4GHz Channel: 1,2,3,4,5,6,7,8,9,10,11,12,13
	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 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, WIFI

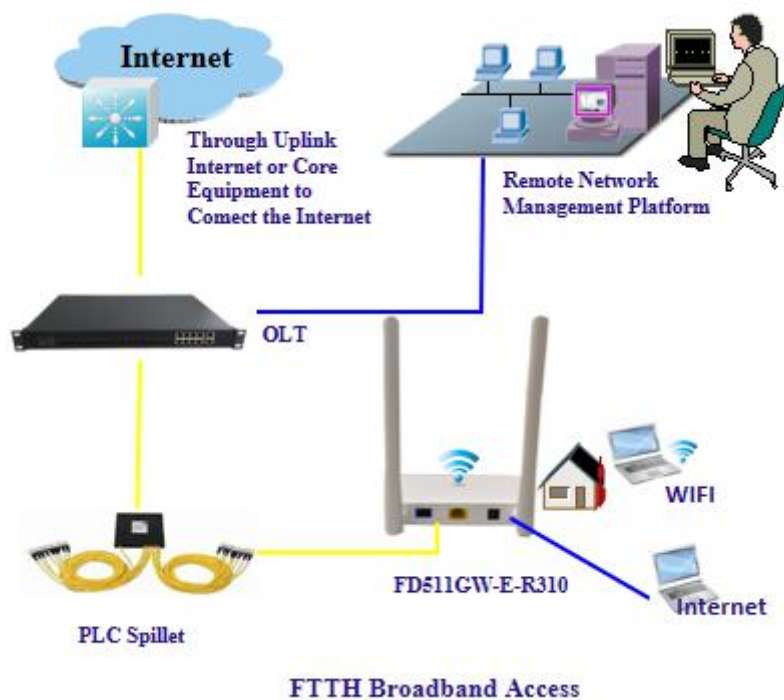


Figure: FD511GW-E-R310 Application Diagram

Ordering Information

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