Specification

R51HD13XR

AC XPON ONU
4GE/2.4G&5.8G WIFI

1 OVERVIEW

- R51HD13XR is designed as HGU (Home Gateway Unit) in different FTTH solutions. The carrier-class FTTH application provides data and video service access.
- R51HD13XR is based on mature and stable, cost-effective XPON technology. It could switch automatically into EPON mode or GPON mode when access to the EPON OLT and GPON OLT.
- R51HD13XR adopts high reliability, easy management, configuration flexibility and good quality of service guarantees to meet the technical performance of EPON Standard of China Telecom CTC3.0 and GPON Standard of ITU-TG.984.X

2 FUNCTIONAL FEATURE

- Support EPON/GPON mode and switch mode automatically
- Support Route mode for PPPoE/DHCP/Static IP and Bridge mode
- Support IPv4 and IPv6 Dual mode
- Support 2.4G&5.8G WIFI and Multiple SSID
- Support LAN IP and DHCP Server configuration
- Support Port Mapping and Loop-Detect
- Support Firewall function and ACL function
- Support IGMP Snooping/Proxy multicast feature
- Support TR069 remote configuration and maintenance
- Specialized design for system breakdown prevention to maintain stable system

3 HARDWARE SPECIFICATION

Technical item	Details
PON Interface	1 GPON BoB（Bosa on Board） Receiving sensitivity: ≤-27dBm Transmitting optical power: 0~+5dBm Transmission distance: 20KM
Wavelength	TX: 1310nm, RX: 1490nm
Optical Interface	SC/UPC Connector (Regular) SC/APC(Customize)
Chip Spec	RTL9607C DDR3 256MB
Flash	1Gbit SPI NAND Flash
LAN Interface	4 x 10/100/1000Mbps auto adaptive Ethernet interfaces. Full/Half, RJ45 connector
Wireless	Compliant with IEEE802.11b/g/n, ac 2.4G Operating frequency:2.400-2.4835GHz 5.8G Operating frequency:5.150-5.825GHz 2.4G 2*2 MIMO, rate up to 300Mbps 5.8G 2*2 MIMO, rate up to 867Mbps 4 external antennas 5dBi Support Multiple SSID
LED	9 LED, For Status of PWR、LOS、PON、LAN1~LAN4、2.4G、5.8G
Push-Button	2 For Function of Factory Reset and WPS
Operating Condition	Temperature: 0℃~+50℃ Humidity: 10%～90%（non-condensing）
Storing Condition	Temperature: -30℃~+60℃ Humidity: 10%~90%（non-condensing）
Power Supply	DC 12V/1A
Power Consumption	≤6W
Dimension	248mm×158mm×29mm（L×W×H）
Net Weight	0.3Kg

4 PANEL LIGHTS INTRODUCTION

Pilot Lamp	Status	Description
PWR	On	The device is powered up.
	Off	The device is powered down.
LOS	Blink	The device doses not receive optical signals or with low signals.
	Off	The device has received optical signal.
PON	On	The device has registered to the PON system.
	Blink	The device is registering the PON system.
	Off	The device registration is incorrect.
LAN1~LAN4	On	Port (LANx) is connected properly (LINK).
	Blink	Port (LANx) is sending or/and receiving data (ACT).
	Off	Port (LANx) connection exception or not connected.
2.4G	On	2.4G WIFI interface up
	Blink	2.4G WIFI is sending or/and receiving data (ACT).
	Off	2.4G WIFI interface down
5.8G	On	5G WIFI interface up
	Blink	5G WIFI is sending or/and receiving data (ACT).
	Off	5G WIFI interface down

5 APPLICATION

- Typical Solution： FTTH(Fiber To The Home)
- Typical Business： INTERNET、IPTV、WIFI etc

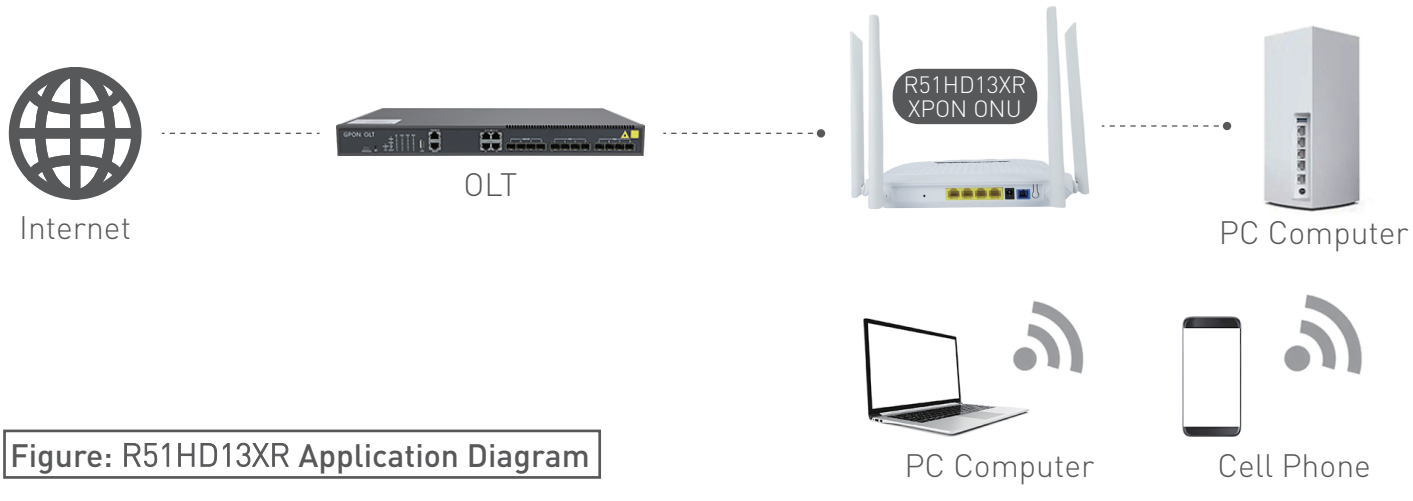

Figure: R51HD13XR Application Diagram