



Appearance: Choose your preferred color (supports custom colors)

## Specification

# Z52HD12XR

AX XPON ONU

4GE+CATV+2USB

2.4G&5.8G WIFI

## 1 OVERVIEW

- Z52HD12XR is designed as HGU (Home Gateway Unit) in different FTTH solutions. The carrier-class FTTH application provides data service access.
- Z52HD12XR 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.
- Z52HD12XR 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 IEEE 802.11ax
- Support SIP Protocol for VoIP Service
- 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





## HARDWARE SPECIFICATION

Technical item	Details
PON Interface	1 GPON BoB (Bosa on Board) Receiving sensitivity: $\leq -27\text{dBm}$ Transmitting optical power: $0\sim+5\text{dBm}$ Transmission distance: 20KM
Wavelength	TX: 1310nm, RX: 1490nm
Optical Interface	SC/UPC Connector
Chip Spec	ZX279128S DDR3 4Gbit
Flash	2Gbit 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, ax 2.4G Operating frequency: 2.400-2.4835GHz 5.8G Operating frequency: 5.150-5.825GHz 2.4G 2*2 MIMO, rate up to 574Mbps 5.8G 3*3 MIMO, rate up to 2402Mbps 5 external antennas 5dBi Support Multiple SSID
VoIP Interface	FXS, RJ11 connector Support: G.711/G.723/G.726/G.729 codec Support: T.30/T.38/G.711 Fax mode, DTMF Relay Line testing according to GR-909
USB	Standard USB2.0 and USB3.0
LED	11 LED, For Status of WPS、5G、WLAN、FXS、LAN1~LAN4、LINK、PON、POWER
Push-Button	4 For Function of Factory Reset、WPS、WiFi、POWER
Operating Condition	Temperature: $0^{\circ}\text{C}\sim+50^{\circ}\text{C}$ Humidity: 10%~90% (non-condensing)
Storing Condition	Temperature: $-30^{\circ}\text{C}\sim+60^{\circ}\text{C}$ Humidity: 10%~90% (non-condensing)
Power Supply	DC 12V/1.5A
Power Consumption	$\leq 6\text{W}$
Dimension	293mm×144mm×54mm (L×W×H)
Net Weight	0.35Kg
Storing Condition	Temperature: $-30^{\circ}\text{C}\sim+60^{\circ}\text{C}$

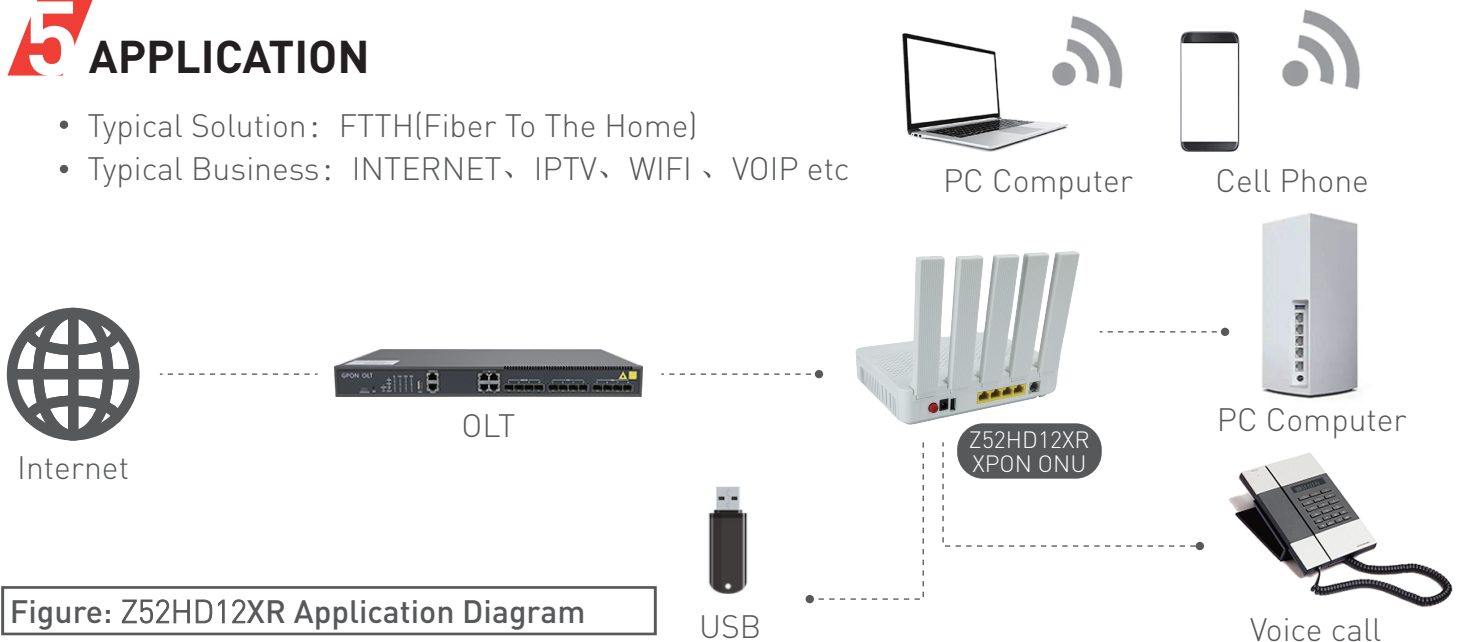


## PANEL LIGHTS INTRODUCTION

Pilot Lamp	Status	Description
PWR	On	The device is powered up.
	Off	The device is powered down.
LOS	Blink	The device does 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.
INTERNET	On	The device has registered to the PON system.
	Blink(Every 30 seconds)	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
WPS	On	The WIFI interface is securely establishing a connection
	Off	The WIFI interface does not establish a secure connection.

## APPLICATION

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



**Figure: Z52HD12XR Application Diagram**