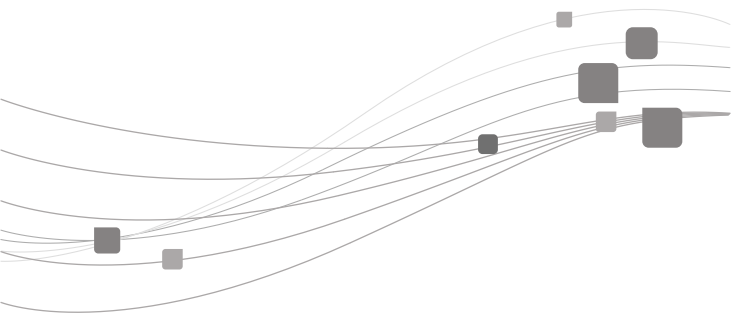


ZXHN F668

GPON ONT

User Manual



ZTE CORPORATION

ZXHN F668 GPON ONT User Manual

Manual No: SJ-20141205161706-001
Edition Time: 2015-09-22 (R1.1)

LEGAL INFORMATION

Copyright © 2015 ZTE CORPORATION.

The contents of this document are protected by copyright laws and international treaties. Any reproduction or distribution of this document or any portion of this document, in any form by any means, without the prior written consent of ZTE CORPORATION is prohibited. Additionally, the contents of this document are protected by contractual confidentiality obligations.

All company, brand and product names are trade or service marks, or registered trade or service marks, of ZTE CORPORATION or of their respective owners.

This document is provided "as is", and all express, implied, or statutory warranties, representations or conditions are disclaimed, including without limitation any implied warranty of merchantability, fitness for a particular purpose, title or non-infringement. ZTE CORPORATION and its licensors shall not be liable for damages resulting from the use of or reliance on the information contained herein.

ZTE CORPORATION or its licensors may have current or pending intellectual property rights or applications covering the subject matter of this document. Except as expressly provided in any written license between ZTE CORPORATION and its licensee, the user of this document shall not acquire any license to the subject matter herein.

ZTE CORPORATION reserves the right to upgrade or make technical change to this product without further notice.

Users may visit ZTE technical support website <http://support.zte.com.cn> to inquire related information.

The ultimate right to interpret this product resides in ZTE CORPORATION.

1 Safety Precautions

Usage Cautions

- Read all the safety cautions carefully before using the device.
- Only use the accessories included in the package such as power supply adapter
- Do not extend the power cord, otherwise the device will not work.
- The power supply voltage must meet the requirements of the device input voltage (The voltage fluctuation range is less than 10%).
- Keep the power plug clean and dry to prevent any risk of electric shock or other dangers.
- Disconnect all the cables during a lightning storm to prevent the device from damage.
- Power off and unplug the power plug when the device is not in use for a long time.
- Do not attempt to open the covers of the device. It is dangerous to do so when the device is powered ON.
- Do not directly stare at the optical interface to prevent any eye injuries.
- Power off and stop using the device under the conditions such as abnormal sound, smoke, and strange smell. Contact the service provider for maintenance if the device is faulty.



Note:

The users should read the usage cautions above carefully and will be responsible for any incident resulting from the violation of the above cautions.

Environment Requirements

- Ensure proper ventilation to the device. Place the device away from direct sunlight and never spill any liquid on the device.
- Do not place any object on the device to prevent any deformation or damage to the device.
- Do not place the device near any source of heat or water.
- Keep the device away from any household appliances with strong magnetic or electric fields such as the microwave oven and refrigerator.

Cleaning Requirements




- Before cleaning, power off the device, and unplug all the cables connected to the device such as the power cable, optical fiber, and Ethernet cable.
- Do not use any liquid or spray to clean the device. Use a soft dry cloth.

Environment Protection

- Do not dispose the device improperly.
- Observe the local regulations about the equipment disposal or treatment.

2 Package Content

Please make sure the ZXHN F668 package contains the following items

Item	Name	Quantity
	ZXHN F668 unit	One
	Power adapter	One
	RJ-45 Ethernet cable	One

One *ZXHN F668 GPON ONT User Manual* is delivered with the product.

If any of the items included in the package is incorrect, lost or damaged, please contact your service provider. If you need to replace the product, please keep the package and all the items in good condition.

3 Indicator

Figure 3-1 shows the indicators on the front panel of the ZXHN F668 unit.

Figure 3-1 Indicators of the ZXHN F668 Unit

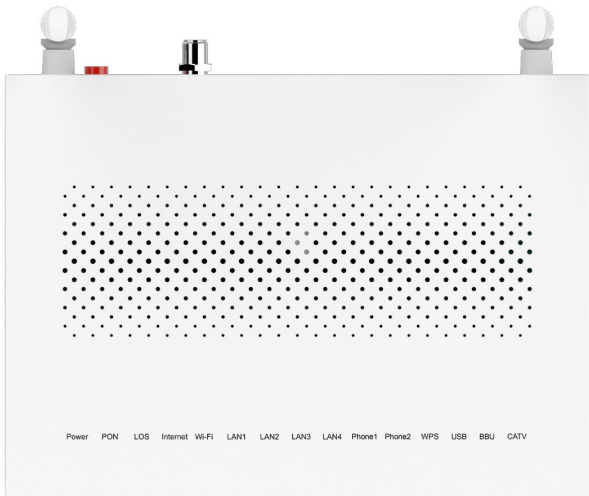


Table 3-1 describes the indicators on the front panel of the ZXHN F668 unit.

Table 3-1 Indicators on the Front Panel

Indicator	Status	Description
Power	Off	No power
	Solid green	Power on
PON	Off	The ONT registration fails or the device is not powered on.
	Solid green	The ONT registration is successful.
	Flashing green	The ONT is being registered.

Indicator	Status	Description
LOS	Off	The ONT received optical power is normal or the device is not powered on.
	Solid red	The optical transmitter of the PON interface is powered off.
	Flashing red	The ONT received optical power is lower than the optical sensitivity of the receiver.
Internet	Off	The device is not powered on or the WAN connection to Internet is not available.
	Solid green	The WAN connection to Internet is established and the device gets an IP address.
	Flashing green	Data is being transmitted via the WAN connection to Internet.
Wi-Fi	Off	The device is not powered on or the wireless interface is disabled.
	Solid green	The wireless interface is enabled.
	Flashing green	The data is being transmitted.
LAN1 – LAN4	Off	The device is not powered on or the network link is not established.
	Solid green	The network link has been established but no data is being transmitted.
	Flashing green	Data is being transmitted.
Phone1–P- hone2	Off	The device is not powered on or it cannot be registered to the soft switch.
	Solid green	The device has been registered to the soft switch, but there are NO VoIP services.
	Flashing green	The VoIP service is being provided.

Indicator	Status	Description
WPS	Solid yellow	The negotiation is being made.
	Solid green	The negotiation is successful.
	Solid red	The session overlapping detection or negotiation fails.
USB	Off	The device is not powered on or the USB interface is not connected.
	Solid green	The USB interface is connected to the USB storage device, or connected to the printing device, but no data is being transmitted or received.
	Flashing green	The data is being transmitted or received.
BBU	Off	The battery is not in place or expires.
	Solid green	The battery is in place and in good condition.
	Flashing green	The battery is in place but in abnormal status.
CATV	Off	The device is powered off or CATV interface is disabled.
	Solid green	The CATV interface is started, and the received optical power is between -6 dB and 0 dB.
	Solid orange	The CATV interface is started, and the received optical power is larger than 0 dB.
	Solid red	The CATV interface is started, and the received optical power is smaller than -6 dB.

4 Interface

Figure 4-1 shows the interfaces and buttons on the back panel of the ZXHN F668 unit.

Figure 4-1 Interfaces and Buttons on the Back Panel

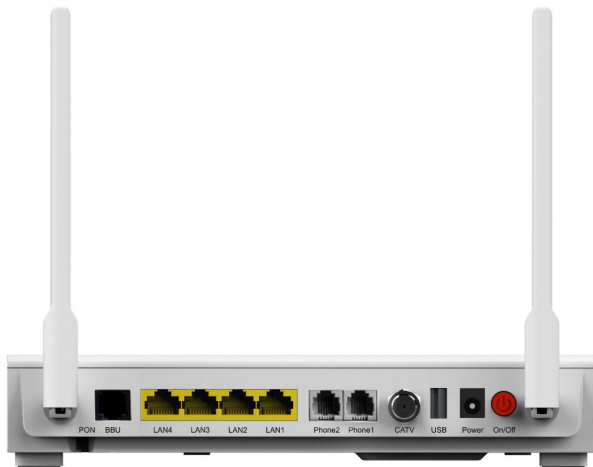


Table 4-1 describes the interfaces and buttons on the back panel of the ZXHN F668 unit.

Table 4-1 Descriptions of the Interfaces and Buttons on the Back Panel

Interface/Button	Description
On/Off	Power switch
Power	12 V DC power connector
USB	USB interface
CATV	RF interface, connected to TV set with a coaxial cable.
LAN1 – LAN4	RJ-45 Ethernet interface
Phone1–Phone2	RJ-11 telephone interface, connected to the telephone with RJ-11 telephone cable.

Interface/Button	Description
BBU	Backup power supply interface
PON	PON interface

Figure 4-2 shows the interfaces and buttons on the side panel of the ZXHN F668 unit.

Figure 4-2 Interfaces and Buttons on the Side Panel



Table 4-2 describes the interfaces and buttons on the side panel of the ZXHN F668 unit.

Table 4-2 Description of the Interfaces and Buttons on the Side Panel

Interface and Button	Description
Wi-Fi	Enable/disable the WLAN function.
WPS	Enable/disable the Wi-Fi protection. When the Wi-Fi protection is enabled, users can access the network without password.
RESET	Reset button When the power is on, use a needle to press the button for over 5 seconds to restore the default factory settings

5 Product Features

Interface

- GPON interface: SC/APC interface, complying with GPON standards.
- Ethernet interface: 10 Mbps/100 Mbps/1000 Mbps adaptive GE interfaces , RJ-45, complying with IEEE802.3-2005 standards.
- WLAN interface: Complying with IEEE 802.11b/g/n standard.
- CATV interface: RF interface.
- Phone interface: RJ-11 interface.
- USB interface: standard USB 2.0 interface.

Technical Features

The ZXHN F668 device provides the following functions:

- Broadband service: Connected to Internet through the GPON access method.
- Ethernet service: The Ethernet devices are connected to the Internet by connecting the Ethernet interfaces of the ZXHN F668 device.
- IPTV service: Provides Ethernet interfaces, connected to the set-top boxes
- WLAN service: The wireless devices are connected to the Internet by connecting the ZXHN F668 device through the WLAN method.
- CATV service: Provides RF interface, connected to TV set with coaxial cable.
- VoIP service: Provides Phone interface, support SIP and H.248 protocol.

The ZXHN F668 device focuses on the security, QoS, and network management to provides the above functions.

- Security: Provides multi-level authentication based on the device, user and service, and provides the data channel encryption for safety.
- QoS: Provides QoS services meeting the requirements of various services for the local devices and network.
- Network management: Provides multi-mode network management.

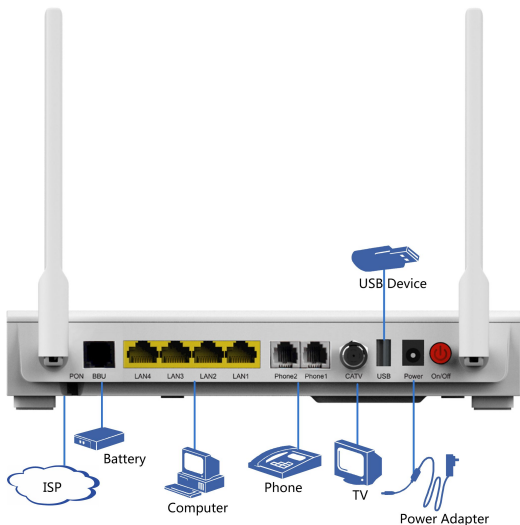
6 Technical Specification

Item	Specification
Dimension	220 mm × 187 mm × 34 mm (Height × Width × Depth)
Rated current	2 A
Rated voltage	DC 12 V
Operation temperature	0°C – 40°C
Operation humidity	5% – 95%

7 Cable Connection

Figure 7-1 shows the devices that are connected to the ZXHN F668 devices.

Figure 7-1 Entire Connection



After the devices are connected to the ZXHN F668 device, press the power button. When the corresponding indicators on the front panel are ON, you can enjoy various services provided by the service provider.

8 Troubleshooting

The power indicator on the front panel is off after the power button is pressed.

The power adapter is not correctly connected to the device. Be sure to use the power adapter supplied with the device.

The LOS indicator is flashing red or solid red after the device is powered on.

- The PON fiber connection is abnormal.
- The optical fiber is not correctly connected to the ONT PON interface.
- The optical fiber is broken or damaged.
- If the indicator is solid red, please contact the service provider for maintenance.

The PON indicator on the front panel is off after the device is powered on.

- The GPON link is not established.

- The ONT is not registered.
- Please contact the service provider for help.

The LAN indicator on the front panel is off after the device is powered on.

- The corresponding LAN link is not established.
- The Ethernet cable is not correctly connected to the LAN interface.
- The network device connected to the LAN interface is not powered on.

ZTE

Tomorrow never waits

CERTIFICATION

CHECKER _____

DATE _____

ZTE

Address: No.55, Hi-tech Road South,
ShenZhen, P.R.China

Postcode: 518057

Tel: +86-755-2677 1900

URL: <http://support.zte.com.cn>

E-mail: support@zte.com.cn