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Remark	Description	Editor	Date

折线

正面

Interface/Buttons

Interface/Buttons	Description
BBU(optional)	Standby power supply interface, connected to a standby power supply through a dedicated cable.
Line	PON interface.

5 Product Features

Interface

- GPON interface: GPON standard, SC/APC, comply with ITU-T G.984.4 and G.984.5 standards.
- Ethernet interface: auto-sensing RJ-45 interface in compliance with IEEE 802.3 and IEEE 802.3x.
- Phone interface: RJ-11.
- WLAN interface: complies with IEEE 802.11a, IEEE 802.11b, IEEE 802.11g and IEEE 802.11n.
- USB interface: standard USB 2.0 interface.

Technical Features

- Broadband service access: Connected to Internet through the GPON access method.
- Ethernet service access: Provides Ethernet interfaces, connected to the Ethernet devices, such as the user PC. Provides the Internet access and IPTV services.
- Phone service access: Supports SIP, H.248 and MGCP protocol.
- WLAN: Users can connect to the ZXHN F670E through WLAN.
- Data sharing, backup, and restoration: provides the USB 2.0 interface connected to a USB storage device for file sharing, full backup, and data restoration.
- 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 Product Specification

For the product specifications of the ZXHN F670E, refer to Table 6-1.

Table 6-1 Product Specifications

Technical Specifications	
Dimension	220 mm × 160 mm × 28 mm (Height × Width × Depth, antenna uninstalled)
Certification	CE Certification and WiFi Certification

Power adapter

Adapter models and model:
Rude: RD121100-CSS-10G
Rude: RD121100-CSS-T1G
Rude: RD121100-CSS-1MG
Output: DC 12 V, 1.5 A

Environment Requirements

Operation temperature 0 °C ~ 40 °C (32 °F ~ 104 °F)
Operation humidity 5% ~ 95%(non-condensing)

Software Versions

Software version V1.0.10

7 Cable Connection

Figure 7-1 shows the devices that are connected to the ZXHN F670E device.

Figure 7-1 Entire Connection

Verify that the cable connections are correct, and press the On/Off button. After the power indicator is lit and other indicators operate properly, services of the carrier can be used.

The wireless network scope is affected by the number of walls, wall thickness, wall locations, wall materials, ceilings, and other objects. Meanwhile, the material types and background RF noise also affect the wireless network. To maximize the wireless network scope, comply with the following methods:

- Reduce the number of walls and ceilings between the ZXHN F670E and other network devices.
- Each wall or ceiling reduces the wireless network scope by 1 to 30 meters. Properly place the ZXHN F670E to reduce the number of walls and ceilings.
- Comply with the straight line principle between network devices.
- At 45 degree angle, a wall with the thickness being half a meter is as thick as one meter. To receive more signals, devices need to be placed to enable the signals to be transmitted directly through walls or ceilings.
- The wireless network scope is also affected by building materials.
- The scope is affected by solid metal doors or aluminum studs. Try to place accessing points, wireless routers, and computers, and then signals can be transmitted through dry walls or open channels, for example, FRP products, metal products, insulated walls, fire cabinet, bricks, and concrete weaken the wireless signals.
- Make sure that the ZXHN F670E with the WiFi function keeps far away from the following devices:
 - Keep at least two meters far away from electrical devices or components that generate RF noise. Signals are greatly weakened or even completely disappeared by a 2.4 GHz wireless mobile or X-10, for example, a microwave oven, home security system, blue tooth device, or radio.

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

ZTE
Tomorrow never waits

ZXHN F670E
GPON ONT
User Manual

CERTIFICATION

CHECKER _____
DATE _____
ZTE

Address: No. 55, Hi-tech Road South,
Shenzhen, P.R.China
Postcode: 518057
Tel: +86-755-26771900
URL: http://support.zte.com.cn
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ZTE CORPORATION

反面

ZXHN F670E
GPON ONT
User Manual

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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.
- 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 microwave oven and refrigerator.

Cleaning Requirements

- Before cleaning, power off the device, and unplug all the cables connected to the device, such as 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 or battery improperly.
- Observe the local regulations about the equipment disposal or treatment.

2 Package Content

Please make sure the ZXHN F670E package contains the items, refer to Table 2-1.

Table 2-1 Package Contents

Name	Quantity
ZXHN F670E unit	One
AC-DC power supply adapter	One
RJ-45 Ethernet cable	One
User manual	One

Note:
A solder outlet that is installed near equipment and that shall be easily accessible.

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 F670E unit.

Figure 3-1 Indicators of the ZXHN F670E Unit

Table 3-1 describes the indicators on the front panel of the ZXHN F670E unit.

Indicator	Status	Description
Power	Off	The device is powered off.
	Solid green	The device is powered on.
PON	Off	The ONT registration fails or the system is not powered on.
	Solid green	The ONT registration is successful.
LOS	Flashing green	The ONT is being registered.
	Off	The ONT received optical power is normal.
LOS	Solid red	The optical transmitter of the PON interface at powered off.
	Flashing red	The received optical power is less than the optical receiver sensitivity, or the device is malfunctioning or program damaged.
Internet	Off	The device is not powered on, there is no WAN connection with Internet properties configured, or the WAN configuration is not effective.
	Solid green	There is a WAN connection with Internet properties configured and the WAN configuration is effective.
LAN1-LAN4	Flashing green	Data is being transmitted.
	Off	The device is not powered on or the network link is not established.
Phone1/Phone2	Solid green	The network link has been established but no data is being transmitted or received.
	Flashing green	Data is being transmitted or received.
2.4GHz	Off	The device is not powered on or the voice service is successfully registered on the softswitch, but there is no service traffic.
	Flashing green	There is a voice service traffic.
2.4GHz	Off	The device is not powered on or the wireless interface is disabled.
	Solid green	The wireless interface is enabled.
2.4GHz	Flashing green	Data is being transmitted.

Indicator	Status	Description
3GHz	Off	The device is not powered on or the wireless interface is disabled.
	Solid green	The wireless interface is enabled.
3GHz	Flashing green	Data is being transmitted.
	Yellow	Negotiation is in progress.
WPS	Green	Negotiation is successful.
	Red	System managing solution is being implemented 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 and operating in host mode, but no data is being transmitted.
USB	Flashing green	Data is being transmitted on the interface.
	Off	There is no standby power supply or the standby power supply fails.
BBU(optional)	Solid green	The standby power supply is used and operates properly.
	Flashing green	The standby power supply is used but operates improperly. For example, undercharge occurs.

4 Interface

Figure 4-1 shows the interfaces and buttons of the ZXHN F670E unit.

Figure 4-1 Interfaces and Buttons on the Side Panel

Table 4-1 describes the interfaces and buttons on the side panel of the ZXHN F670E unit.

Figure 4-2 shows the interfaces and buttons of the ZXHN F670E unit.

Figure 4-2 Interfaces and Buttons on the Back Panel

Table 4-2 describes the interfaces and buttons on the back panel of the ZXHN F670E unit.

Interface/Buttons	Description
On/Off	Power switch.
Power	12 V DC power connector.
USB1	Standard USB 2.0 interface, connected to a USB storage device for the sharing, full backup, and data restoration.
Phone1/Phone2	RJ-11 telephone interface, connected to the telephone with RJ-11 telephone cable.
LAN1-LAN4	RJ-45 Ethernet interface.

NOTES(技术要求):

- Dimension after folding(折叠后尺寸): 97*139mm.
- Print colour(印刷颜色): black printing(黑色印刷).
- Material(材质): 70g writing paper (70g 书纸).
- Coating(表面处理): 无.
- Binding process(装订工艺): Paper folding(折页)——对折再包心折.
- Output lpi(输出网线): 200 lpi.
- Tolerance(公差): L(长)*W(宽):±1mm.
- Raw materials and the corresponding post processing should meet requirements defined in the Environmental Protection Technical Standards.
(原材料及后处理工艺均能满足我司《环保技术标准》要求).

效果图

DIM	TOL±				CUSTOMER: ZTE	TITLE: 用户手册	MODEL: ZXHN F670E(V1.0)外置天线	PART NO: 61000000xxxx	DATE: 17'06,07
	RANGE	C1	C2	C3					
	0~6	0.1	0.1	0.15	0.2				
	6~30	0.2	0.3	0.4	0.5				
	30~80	0.25	0.5	0.9	1.2				
	80~180	0.3	0.8	1.2	1.5				
	180~315	0.5	1.3	1.8	3	UNIT'S	mm	VER:	V01
	315~500	0.7	1.5	2.5	4	MAT'L	/	SCALE	N/A
	500~800	0.9	1.8	3	5	FINISH	/	SHEET	1/1
	ANG.TOL±	0°~30°/0.1°	30°~60°/0.3°	60°~90°/0.5°					

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