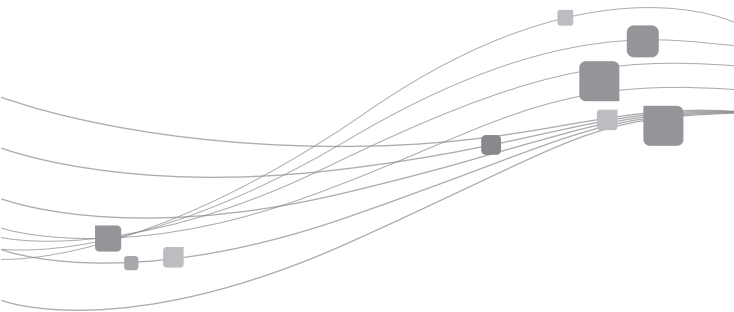


ZXHN F2886Q

XGS-PON ONT

User Manual



ZTE CORPORATION

ZXHN F2886Q XGS-PON ONT User Manual

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1 Safety Precautions

Note

Before using the device, read the following safety precautions. ZTE bears no liability to the consequences incurred by violation of the safety instructions.

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.

Environment Requirements

- Ensure proper ventilation to the device. Place the device away from direct sunlight.
- Keep the device ventilated and dry. 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.

RF Exposure Information

The Maximum Permissible Exposure (MPE) level is calculated based on a distance of $d=20$ cm between the device and the human body. To maintain compliance with the RF exposure requirement, a separation distance of 20 cm between the device and the human should be maintained.

Regulatory notices:

- This device is granted pursuant to the Japanese Radio Law and the Japanese Telecommunications Business Law.
- This device should not be modified (otherwise the granted designation number will become invalid).

Environmental Information

The equipment you purchased has required the extraction and use of natural resources for its production. It may contain substances that are hazardous to people's health and to the environment. To avoid putting such substances into our environment and to reduce pressure on our natural resources, we ask that you reuse or recycle your end-of-life equipment by using an accredited electronics take-back system.

The symbols below indicate that this product should be reused or recycled and not simply discarded. Please locate and use an appropriate reuse and recycling site. If you need more information on collection, reuse and recycling systems, contact your local or regional waste administration. You may also contact your equipment

provider for more information on the environmental performances of these products.



2 Package Content

Please make sure the ZXHN F2886Q package contains the items, refer to Table 2-1.

Table 2-1 Package Contents

Name	Quantity
ZXHN F2886Q unit	One
AC-DC power supply adapter	One
RJ-45 Ethernet cable	One
User manual	One

Note

The list is only for reference. The actual contents may vary from the list.

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 Product Features

Interfaces

- PON interface: XGS-PON standard, SC/UPC, comply with ITU-T G.9807 and ITU-T G.988 standards.

- Ethernet interface: one 100 Mbps/1 Gbps/2.5 Gbps/5 Gbps/10 Gbps interface and four auto-sensing 100 Mbps/1000 Mbps interfaces in compliance with the IEEE 802.3 standard.
- WLAN interface: supports 802.11b/g/n/ax@2.4G Hz & 802.11a/n/ac/ax@5G Hz & 802.11ax@6G Hz Tri-band concurrent Wi-Fi with up to 10.8 Gbps PHY rate and excellent coverage.
- Phone interface: Two POTS ports with RJ-11 connector.

Technical Features

- Broadband service access: Connected to Internet through the XGS-PON 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 protocol.
- WLAN: Users can connect to the ZXHN F2886Q through WLAN.
- 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.

4 Hardware Description

Indicators

Figure 4-1 shows the indicators of the unit.

Figure 4-1 Indicators on the Front Panel

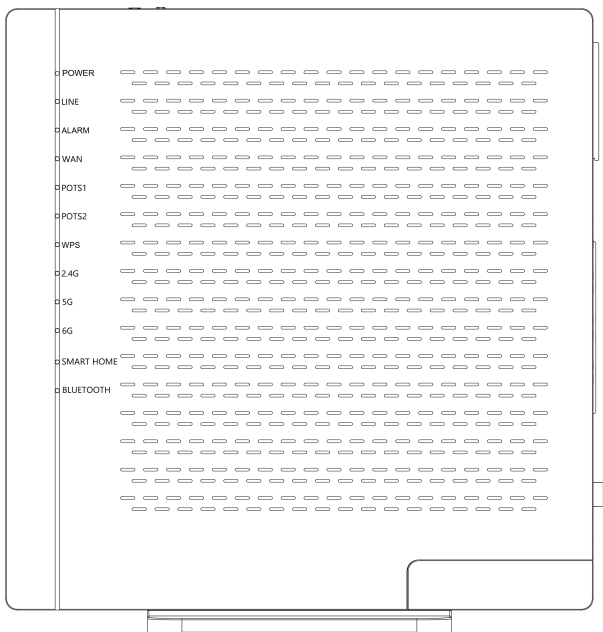


Table 4-1 describes the indicators of the unit.

Table 4-1 Indicators on the Front Panel

Indicator	Color	Status Description
POWER	Off	The ONT is powered off.
	Solid Green	The ONT is powered on.

Indicator	Color	Status Description
PON	Off	The ONT is powered off or no optical fiber is inserted.
	Flashing Green	Flashing quickly (twice per second): The device is being registered and configured under the OLT. Flashing slowly (once per second): The ONU is upgrading the version.
	Solid Green	The ONT registration is successfully.
ALARM	Off	● The ONT is powered off ● The ONT received optical power is normal.
	Solid Red	The optical output of the ONU PON interface is disabled.
	Flashing Red	● The optical fiber is not connected. ● The received signal power of the optical link is too low.
WAN	Off	● The ONT is powered off. ● The WAN connection is powered on but not established.
	Solid Green	A WAN connection is established, an IP address is obtained, but no data is transmitted.
	Flashing Green	A WAN connection has been established, and data is being transmitted.
POTS1 POTS2	Off	● The ONT is powered off. ● The ONT is unable to register on the soft switch/IMS
	Solid Green	The ONT has registered on the soft switch/IMS but no traffic is being transmitted.

Indicator	Color	Status Description
	Flashing Green	Voice service traffic is being transmitted or received.
WPS	Off	● The ONT is powered off. ● The WPS function is disabled.
	Solid yellow	WPS is enabled during automatic negotiation.
	Solid Green	The WPS auto-negotiation is successful.
	Solid Red	Session overlapping check or automatic negotiation fails.
2.4G 5G 6G	Off	● The ONT is powered off. ● The wireless interface is disabled.
	Solid Green	The 2.4G/5G frequency band Wi-Fi is enabled, and no data transmission is available.
	Flashing Green	The 2.4G/5G frequency band Wi-Fi is enabled, and data transmission is available.
SMART HOME	Off	● The ONT is powered off. ● The Z-Wave function is disabled.
	Solid Green	The Z-Wave function is enabled and interconnected with the cloud platform successfully.
	Flashing Green	The Z-Wave function is enabled and the new equipment is being paired.
BLUETOOTH	Off	● The ONT is powered off. ● The BL interface is disabled.
	Solid Green	The bluetooth function is enabled and interconnected with the cloud platform successfully.

Indicator	Color	Status Description
	Flashing Green	The bluetooth function is enabled and the new equipment is being paired.
*10GE	Off	● The ONT is powered off. ● No network cable is connected.
	Solid Green	The ONT is powered on and negotiated with the peer end.
	Flashing Yellow	Data is being transmitted.
*LAN1-LAN3/ TA	Off	1. The ONT is powered off. 2. No network cable is connected.
	Solid Green	The ONT is powered on and negotiated with the peer end.
	Flashing Yellow	Data is being transmitted.

- 10GE, LAN1, LAN2, LAN3 and TA indicators are on the network interface.

Interfaces

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

Figure 4-2 Interfaces and Buttons on the Side Panel

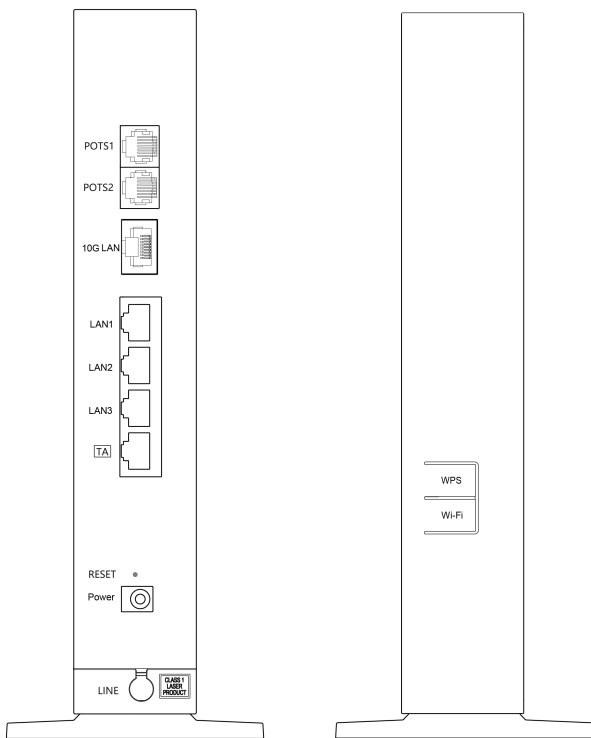


Table 4-2 describes the interfaces and buttons of the unit.

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

Interface/ Button	Description
*POTS1 POTS2	Supports two POTS ports with RJ-11 connector.
10G LAN	Supports 100 Mbps/1 Gbps/2.5 Gbps/5 Gbps/10 Gbps Base-T Ethernet ports with RJ-45 connector.
LAN1 – LAN3 TA	Supports four 10 Mbps/100 Mbps/1000 Mbps Base-T Ethernet ports with RJ-45 connector.
RESET	Reset key used when the device is powered on and activated. ● By using a thin needle, press and hold the Reset button for one second to restart the device. The user's settings information will not be lost. ● By using a thin needle, press and hold the Reset button for more than five seconds to restore the factory settings.
Power	12 V DC power connector.
LINE	SC/APC XGS-PON optical interface.
*WPS	Wi-Fi protection button. After pushing the WPS button for longer than 0.4 s, the WPS function will be enabled.
*Wi-Fi	WLAN button. After pushing the Wi-Fi button no longer than 0.4 s, the WLAN function will be enabled or disabled.

- The POTS interface has a cover plate.
- The WPS and Wi-Fi buttons are on the front side of the device.

5 Product Specification

For the product specifications of the ZXHN F2886Q , refer to Table 5-1.

Table 5-1 Product Specifications

Technical Specifications

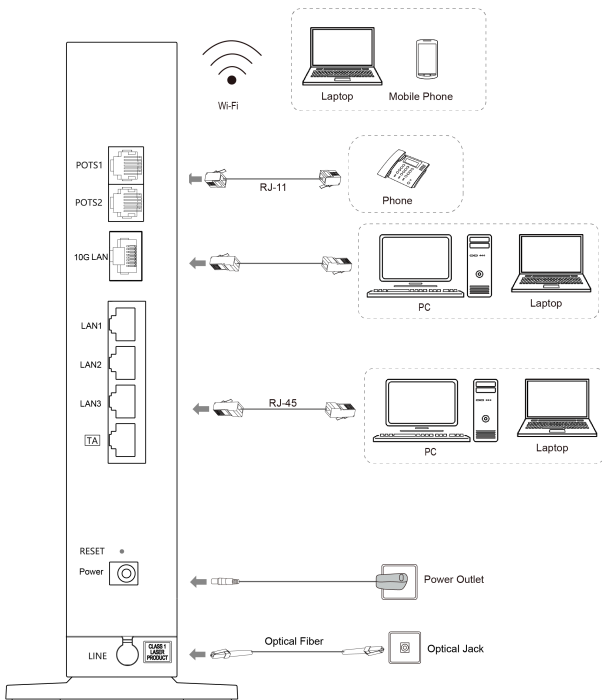
Dimensions	210 mm (H) × 205 mm (W) × 37 mm (D) (The base is not included.)
Power adapter	Rated output: DC 12.0 V, 3.0 A Input: AC 100 V – 240 V, 50 Hz/60 Hz
Environment Requirements	
Operation temperature	0 °C to 40 °C
Operation humidity	5% - 95% (non-condensing)
Wi-Fi Radio Specifications	
Radio Frequencies	Maximum Output Power
Wi-Fi 2.4 GHz band: 2400 MHz – 2483.5 MHz	EIRP: (19 ± 1) dBm
Wi-Fi 5 GHz band: 5150 MHz – 5350 MHz	EIRP: (22 ± 1) dBm
Wi-Fi 5 GHz band: 5470 MHz – 5725 MHz	EIRP: (29 ± 1) dBm
Wi-Fi 6 GHz band: 5945 MHz – 6425 MHz	EIRP: (22 ± 1) dBm

6 Cable Connection

The device provides home users and small-size business users with the XGS-PON uplink optical access and internal networking functions through a 10 Gbps electrical interface or a Wi-Fi interface.

Figure 6-1 shows the devices that are connected to the ZXHN F2886Q device.

Figure 6-1 Entire Connection



After the power indicator is lit and other indicators operate properly, services of the carrier can be used.

The factors affecting the wireless network coverage range include the location of the product, distance between the product and a wireless terminal, number of obstacles, obstacle material and density, and interference source. It is recommend-

ed that you place the product in accordance with the following principles to maximize the strength of wireless signals.

- The product should be far away from the objects affecting wireless signal propagation, for example, an object with a high reflectivity such as a metallic object or a mirror.
- The product should be far away from an electrical appliance with a strong magnetic or electric field, for example, a microwave oven, a refrigerator, a wireless router, a cordless phone, or a Bluetooth product.
- The product should be installed on the same floor as the applied area.
- Do not put other objects on the product. Try to reduce the number of obstacles between the product and a wireless terminal.
- Horizontally place the product in the middle of the applied area and do not put it in a corner.
- Do not place the product at a high position while it is placed horizontally. The recommended height is 1.2 to 1.5 meters.

7 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 ALARM 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.

The LINE indicator on the front panel is off or flashing green after the device is powered on.

- The XGS-PON link is not established.
- The ONT is not registered.
- Please contact the service provider for help.

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

The telephone function is abnormal. Please contact the service provider for help.



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