

Document Description:

The document describes the characteristics and parameters of ONU/ONT and gives a reference of how to install the ONU. Please read the document carefully before you install the ONU/ONT

Notice:

The document describes the several type products. There are the universality and individuality in the different ONU/ONT, please pay attention for it.
Information in this document is subject to change without notice. Please contact with the supplier to get the latest information of the products.

Disclosure Table

Parts	Hazardous Substance					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Placode	×	○	○	○	○	○
Plastic element	○	○	○	○	○	○
Metal element	○	○	○	○	○	○
Packaging material	○	○	○	○	○	○
Accessory	○	○	○	○	○	○

○: Indicates that this toxic or hazardous substance contained in all the homogeneous material, is below the limit requirement of SJ/T11363-2006.
×: Indicates that his toxic or hazardous substance contained in all the homogeneous material fort is beyond the limit requirement of SJ/T11363-2006.

1 Operation Safety Rules

Before operating the device, please read the safety rules carefully.

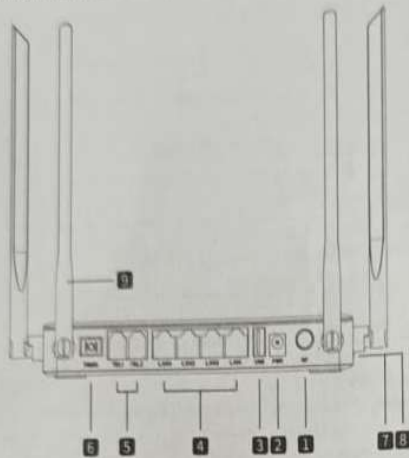
- Confirm the host and accessories intact.
- Please use the external power supply that is included in the package.
- Please check with power voltage. Inaccurate power voltage may cause fire and damage.
- Stop the device and switch off the power before removing or inserting cables.
- Do not install, use, or service this device during a thunderstorm. Please keep the all cable disconnected.
- Do not remove the optical connector cover before connecting fiber to avoid stain the connector.
- Never look directly into the end face of pigtail fiber of optical transmitter or the end face of its active connector.
- Exercise care if you must bend fibers. If necessary, the fiber bending radius should not be less than 38 mm.
- Do not attempt to open it. Non-expert handling of the device could damage it. Consult your authorized dealer for help, or else it may cause fire, electric shock and breakdown.
- Avoid wetting the unit with any liquid.
- The equipment should be installed at positions with good ventilation conditions and without high temperature or direct sunshine, so as to avoid faults of the equipment and its corresponding components due to overheat.
- Leave a space of at least 10 cm around the device for heat dissipation.
- Keep the device away from heat sources or bare fire sources, such as electrical heaters and candles.
- Keep the device away from the electrical appliances with strong magnetic fields or strong electric fields, such as microwave ovens, refrigerators, and mobile phones.
- In case of any abnormalities, such as smoke, abnormal sound, or door, immediately stop the device, switch off the power, and remove all cables, including the power cable, optical fibers, and network cables, from the device.
- Keep the device out of the reach of children as the components or accessories may be swallowed.
- Dispose of the obsolete device to the specified recycle place. Abide by the local laws and regulations to handle the packaging materials, run-out obsolete device.



Class 1 Laser Product

2 Interface and Connection

Example with 4GE+2POTS+CATV+WIFI type ONU/ONT



- 1 RF port
- 2 DC power port
- 3 USB
- 4 LAN port
- 5 Voice port
- 6 PON Optical port
- 7 Reset
- 8 WPS
- 9 Antenna

According to the product determine its location and position

3 Installation Procedure

- 3.1 Check packing list and all parts in the product package and intact.
- 3.2 ONU/ONT can be placed on a horizontal workbench or mounted onto a wall vertically or horizontally. Ensure no obstacles on the worktable and the surroundings affecting the installation of the device exist.
- 3.3 Refer to the preceding cable connections to connect the ONU/ONT:
 - Connect the OPTICAL port with the fiber
 - Connect the Ethernet port of the PC to the LAN port with the network cable
 - Connect the telephone set or fax to the TEL port with the telephone cable
 - Connect coaxial cable: connect the coaxial cable to the ONU/ONT RF connector
 - Connect the power adapter to the PWR port
- 3.4 If the ONU/ONT is powered on, the PWR LED is on in green. If the PON port has the optical signal from the OLT, the LOS will be off. The PONLED blink means the ONU/ONT in registering to the OLT. When LED still on, a connection had created between the ONU/ONT and the OLT.

4 Indicator

Indicator		Description
PWR	Power status	<ul style="list-style-type: none"> ● On: The ONU/ONT is power on ● Off: The ONU/ONT is Power off
LANn	LAN port status	<ul style="list-style-type: none"> ● On: Ethernet connection is normal ● Blinking: Data is being transmitted through the Ethernet port ● Off: Ethernet connection is not set up
LOS	optical signals	<ul style="list-style-type: none"> ● On: Optical power lower than receiver sensitivity ● Off: Optical in normal
PON	ONT Register	<ul style="list-style-type: none"> ● On: Success to register to OLT ● Blinking: In process of registering to OLT ● Off: Failed to register to OLT
*INT	Internet status	<ul style="list-style-type: none"> ● On: The routed WAN Internet service is normal ● Off: The routed WAN Internet service is abnormal
*TEL	Telephone port status	<ul style="list-style-type: none"> ● On: The connection between the TEL port and the voice server has been setup ● Blinking: The voice service of the TEL port is established ● Off: The connection between the TEL port and the voice server is not setup
*WIFI	WiFi	<ul style="list-style-type: none"> ● Blinking: Data is being transmitted ● On: WiFi function Opens
*CATV	CATV status	<ul style="list-style-type: none"> ● On: CATV optical normal ● Off: The CATV signals are not received
*OPT-DG	Optical detection	<ul style="list-style-type: none"> ● On: Optical power is too high ● Blinking: Optical power reaches critical value ● Off: Optical power is normal

*INT,WIFI,TEL and CATV LED could only config on ONU/ONT which has this function.

5 Specifications

Item	Specifications
PON Port	<ul style="list-style-type: none"> ● Optical interface: one GPON/EPON optical port ● Fiber: single-mode fiber ● Wavelength: Tx 1310nm, Rx1490nm ● Tx Optical Power: 0 ~ 4dBm ● Rx Sensitivity: -27dBm ● Saturation Optical Power: -8dBm(GPON)/-3dBm (EPON)
LAN Port	<ul style="list-style-type: none"> ● 100M or 1000M Ethernet port ● RJ45 connector ● Auto MDI/MDI-X ● Full/half duplex mode ● 100m distance

Telephone Port	<ul style="list-style-type: none"> ● RJ-11 voice ports ● 3km distance maximum ● 1 or 2 REN per RJ11 port ● Vrms>50V
Power Supply	<ul style="list-style-type: none"> ● External 12VDC power adapter
Environment	<ul style="list-style-type: none"> ● Work Temperature: 0 ~ 40℃ ● Storage Temperature: -40 ~ 85℃ ● Work Humidity: 10% ~ 90% No-condensing ● Storage Humidity: 5% ~ 95% No-condensing

6 FAQ

When you have trouble in installation or operation, please reference to next table.

common fault	Troubleshooting
PWR indicator LEDs are OFF	<p>Please check the power supply:</p> <ul style="list-style-type: none"> ● Check whether the power connection cable is connected well with the outlet. ● Check whether the power button is On. ● Check whether the voltage is normal.
LOS LED light	<p>If optical port LOS light keep on, the optical signal from PON optical port is a bnormal, please check:</p> <ul style="list-style-type: none"> ● Whether connect the PON port in properly? ● Optical fiber connector type matches the optical interface? ● Whether the optical link loss is too higher, the input optical power is lower than the PON port receiving sensitivity?
LINK LED Blinking	<p>If ONU/ONT registration fails:</p> <ul style="list-style-type: none"> ● Whether the input optical power value is exceed ONU/ONT's saturation optical power value. ● Whether the input optical power value is less than receiving sensitivity. ● Whether OLT works properly, or other ONU/ONT belong to same OLT PON port can register successful. If other ONU/ONT is in similar case, it may cause by the OLT. ● In EMS, if the ONU/ONT is in the OLT block list, then the ONU/ONT can't be registered. By default, all the connected ONU/ONT are not blocked which are able to register.
Packet loss	<ul style="list-style-type: none"> ● Check whether the optical connector is dirty or bend radius is too small. ● Check LAN port conection, and whether the work mode is matched. ● Check whether the device connect with ONU/ONT work normally.
LAN LED Off	<ul style="list-style-type: none"> ● Check whether the network cable is longer than 100M. ● Check whether the network cable is connected properly.