



# WI-TEK FTTH ONU EQUIPMENT User's Manual

V1.0

WI-G0

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# 1、 Safety reminder

Please read all safety precautions carefully before using ONU, As follows:

- ▲ ONU is usually used in FTTH application。
- ▲ Do not look directly at the optical fiber interface on ONU to avoid eyes impairment。
- ▲ Do not let children play with ONU and accessories to avoid dangerous behavior。
- ▲ the supply voltage of ONU must meet the requirements of equipment input voltage。
- ▲ Prohibit the use of non-standard power adapters to avoid affecting the normal use of ONU or introducing security risks.
- ▲ If the power adapter is damaged or broken, do not use immediately to avoid Risk.
- ▲ Please prevent foreign bodies , especially water or other liquids, from entering equipment through the aperture, so as to avoid causing equipment failure, thereby introducing safety risks。
- ▲ When using the ONU, keep hands dry, and disconnect power supply first.。
- ▲ In thunderstorm weather, please disconnect the ONU power supply and pull out all cables connected to the light cat, such as power cord, power adapter, net cable and fiber cable, in order to avoid damage or personal injury。
- ▲ Please install the ONU in strictly accordance with the requirements. Keep distance more than 10 cm to heat radiation. Avoid storing flammable materials around the ONU and keep away from the space with strong magnetic or electric fields, such as microwave ovens and refrigerators。
- ▲ Do not place anything on the ONU。
- ▲ Do not disassemble the ONU by yourself. If the ONU fails, please contact the designated maintenance point.。
- ▲ Please abide by the relevant local laws and regulations about the using of ONU and support recycling actions。

note:

Please read the above instructions carefully before using the ONU. Users are responsible for any accident caused by using the ONU not in accordance with the above instructions.。

## 2、 Packing list

After opening the package of the ONU device, make sure that the following components are included:

NO.	Name	QTY	Unit
1	GPON ONU	1	PCS
2	Power adapter	1	PCS
3	warranty	1	PCS

the actual components included in the package shall be provided by the distributor。

note:

If any of the above components are incorrect, lost or damaged, please contact us immediately. If the user needs to change the product, please keep the packaging box and existing components of the product as well as possible.

### 3、 Equipment features

#### ■ features

- ▲ Optical fiber access: Connecting with Internet through GPON
- ▲ Ethernet: Provides the Ethernet interface, through which can connect the Ethernet equipment, IPTV television, PC and so on

#### ■ Technical spec

Item	Description
size	108*85*25mm (framemain)
Power adapter	Input 220V AC 50Hz, output DC12V 0.5A
Rated voltage	DC 12V
Rated current	0.5A
operating temperature	0° C ~ 40° C
operating humidity	5% ~ 95% (non-condensing)
Storage temperature	-10 ° C ~ +50° C
Storage humidity	30% ~ 95%RH (non-condensing)

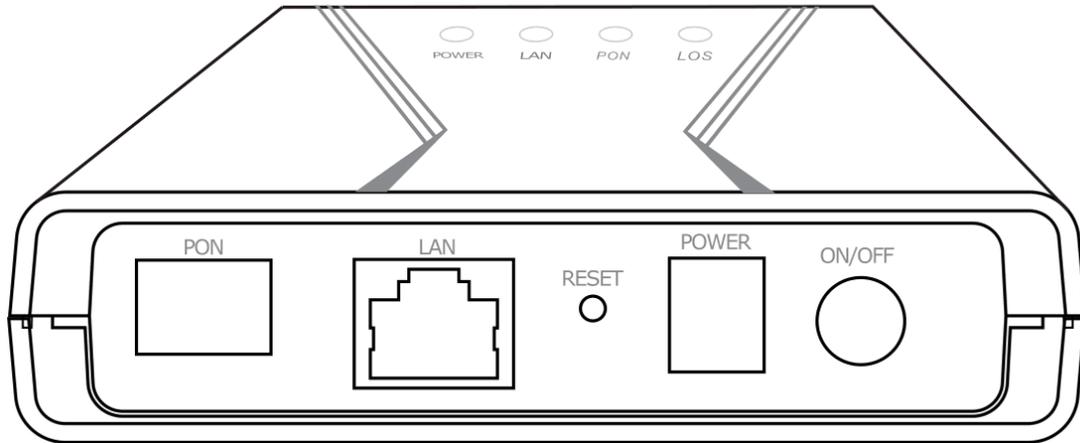
#### ■ Standard

- ▲ GON interface, ITU G983,G984
- ▲ LAN interface: 10/100/1000M auto-negotiation, IEEE802.3I/IEEE802.3U



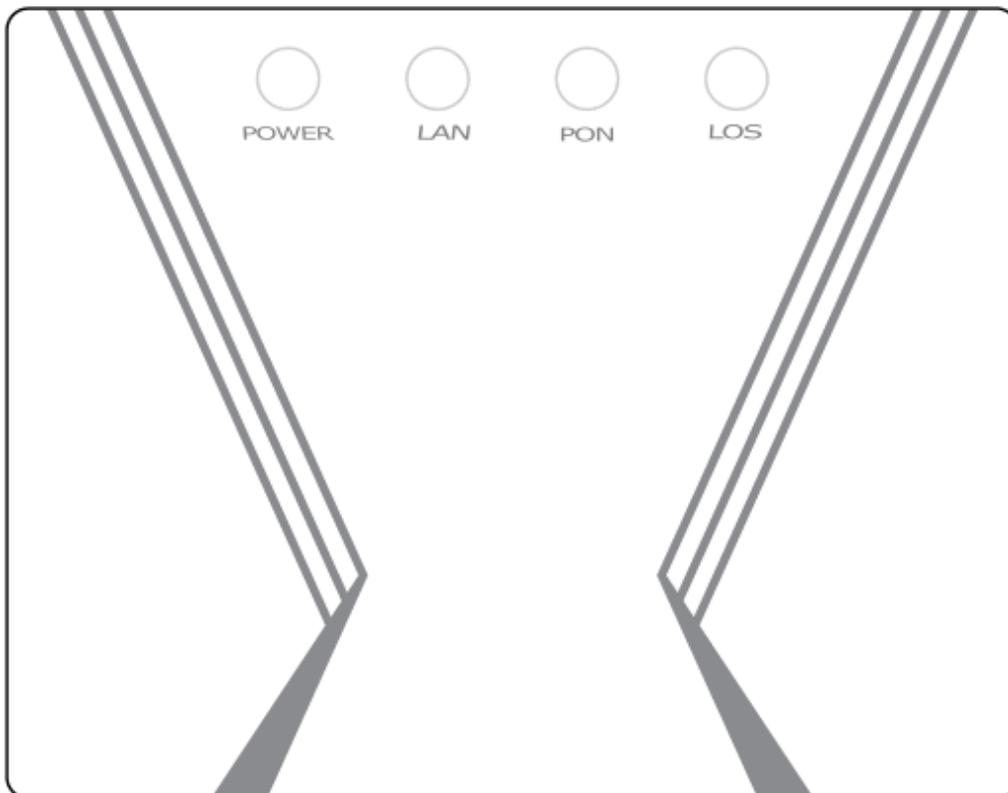
## 4、 equipment appearance：

### ■ 3D view



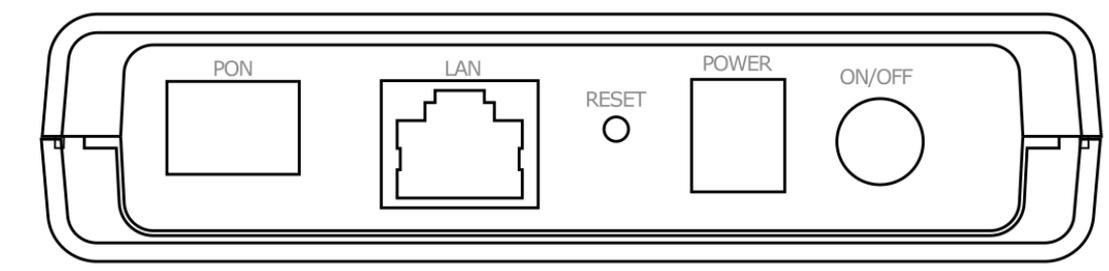
interface: 1\*GE LAN+1\*PON;  
Connection mode: bridge&route;

### ■ The definition of indicator LEDS



LED	Color	Description
PON	Green	off: ONU ports link faulty  on: PON registered  flicker: PON registering
LOS	Green	off: detected fiber to input  flicker: fail to connect with PON port
LAN	Green	off: link down faulty  on: Link up correctly  flicker: data is transmitting
PWR	Green	off: successfully connect with power  on: fail to connect with power

■ Front view and left view



PWR	Power socket connected to the attached power adapter
LAN	Connect to Ethernet terminal. interface:RJ45
PON	Connecting to Operator Network via Single Mode Optical Fiber
ON/OFF	Switch Button, Press it to turn on or off the power supply
RESET	Reset button,Long Press it to make ONU Resume factory Settings

## 5、 Installation

The location of the installation of the ONU should ensure that it can meet the conditions of linking with the outside world. Usually, the ONU is installed on the user's desktop or in the information box in the user's home. Installation methods include desktop and Wall fixation.

### ■ desktop:

- Remove dustproof plug at PON port;
- Connected optical Fiber Provided by Operator to PON Interface
- Place the ONU flat on the desktop

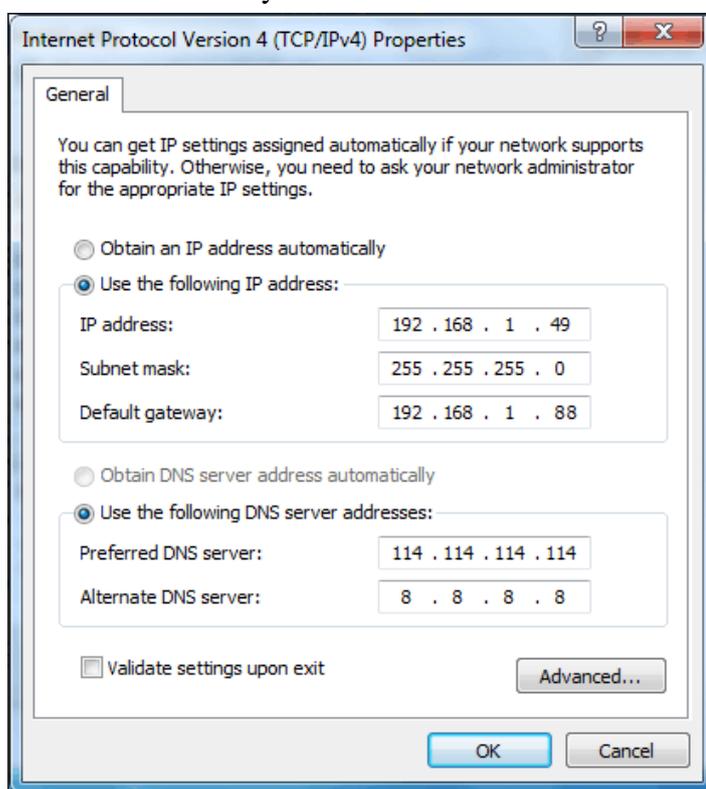
### ■ Wall fixation:

- Remove dustproof plug at PON port;
- Connected optical Fiber Provided by Operator to PON Interface
- Remove the fixed panel of ONU in the information box, and the screw and bolt used for fixing the equipment on the panel, fix the ONU on the panel. Note that the ONU port needs to be placed downward.

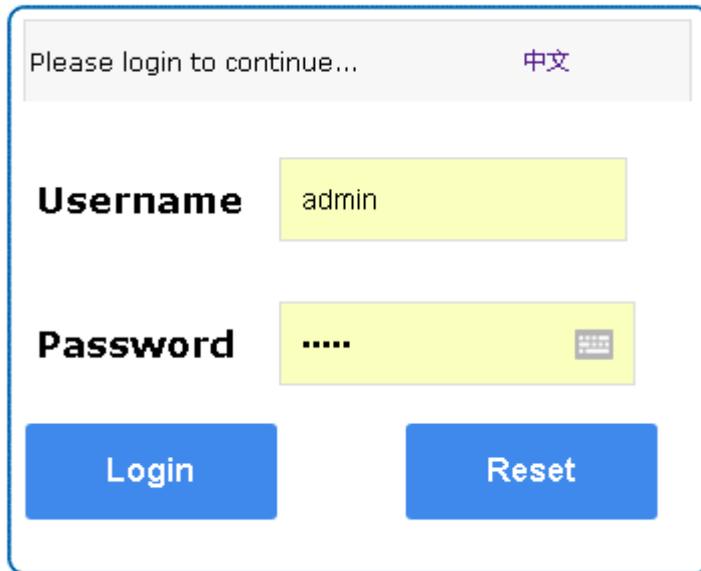
## 6、 Equipment configuration

### ■ Login WEB page

1 set PC ip: 192.168.1.49, default gateway IP: 192.168.1.88, then connecting PC port to any LAN of ONU with RJ45 UTP,Waiting for the connection to succeed, the ONU's LED is always on.



2 Open IE Browser, Input address: http://192.168.1.88/, entry the user login page, Enter the default username and password, which is printed on the bottom of ONU;



Please login to continue... [中文](#)

**Username**

**Password**

3 After successful login, the display web is as follows.



Wi-Tek Communication Solution WI-GO

Status | Network | Security | Application | Administration | Help

Device Information

- Device Information
- Network Interface
- User Interface

Model	210G
Serial Number	-
Hardware Version	V1.0
Software Version	SFUV1.1
Boot Loader Version	SFUV1.1
PON Serial Number	GPON00000001
Password	123456

[www.wireless-tek.com](http://www.wireless-tek.com)

- Create a WAN connection, Start routing mode entry “Network” --> “WAN” --> “WAN Connection”

The description of this page parameter

function	description
New Connection Name	Default NULL.Input Box for String
Enable VLAN	Default close
VLAN ID	Enable VLAN select open .Default NULL.Input Box for 0 ~ 4096
802.1P	Enable VLAN select open .Default NULL.Option 0 ~ 7
Type	Default Route
Service list	Default INTERNET
MTU	User Configuration Maximum Transmission Packet Length
Link type	Default ppp.Option IP
username	Link type select ppp .User Name Input Box for PPPOE Dial-up Provided by Operators
password	Link type select ppp .Password input box for PPPOE Dial-up Provided by Operators
Auth type	Link type select ppp .Auto 、 PAP、 CHAP
Connection Trigger	Link type select ppp .Dial-up mode can choose two models,

	<p>the default "automatic dialing".</p> <p>» always on: the ONU automatically initiates PPPOE dialing after OLT is on line</p> <p>» required ON: When a data transmission request is made, the PPPOE channel is automatically established, and the connection of the PPPOE is automatically disconnected after 20 minutes by default.</p>
IP Version	Default IPv4.Option IPv6,IPv4/IPv6
PPP TransType	Link type select ppp.Default PPPoE
Enable NAT	IP Version select IPv4 or IPv4/IPv6.Default open

■ Internet access mode settings, Connection mode is PPPOE

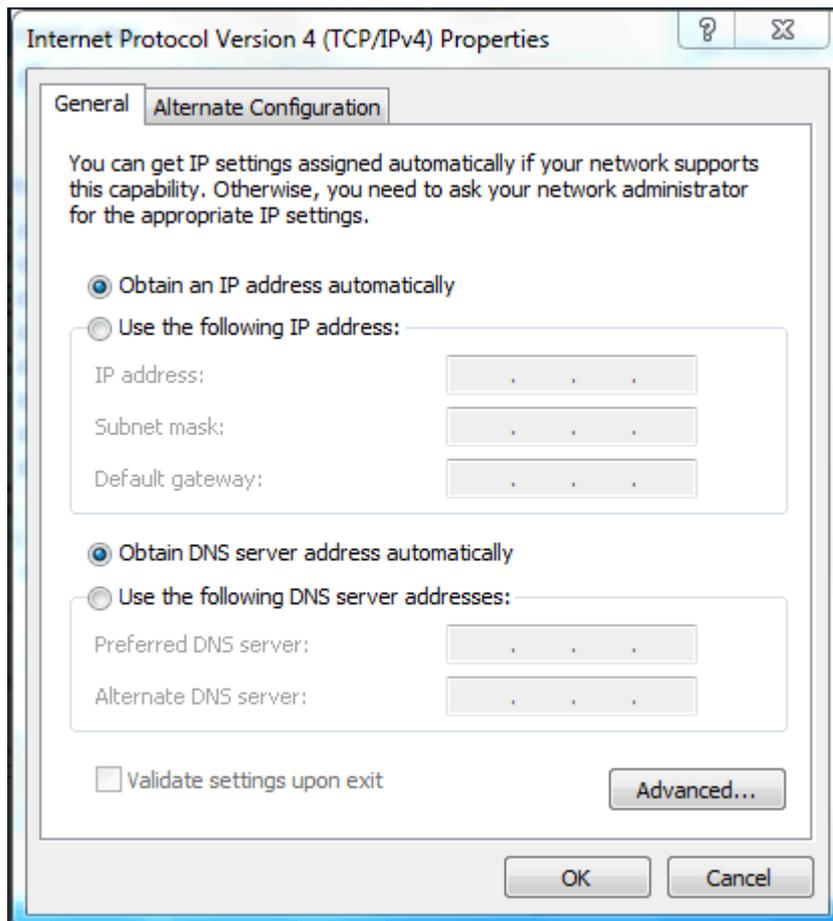
1 always on

always on : Internet access means PPPOE dial-up automatically when the ONU is turned on. When the dial-up is successful, PC and other terminals can connect to the ONU to access the Internet without PC and other terminals to do Internet dial-up again.

entry “network” --> “WAN” --> “WAN Connection” , connection type PPP; connection trigger “always on” , input username and password。

The PC is connected to the ONU through the network cable. It does not need to dial on the PC. It only needs to configure the PC network card to "obtain an ip address automatically" to access the Internet.





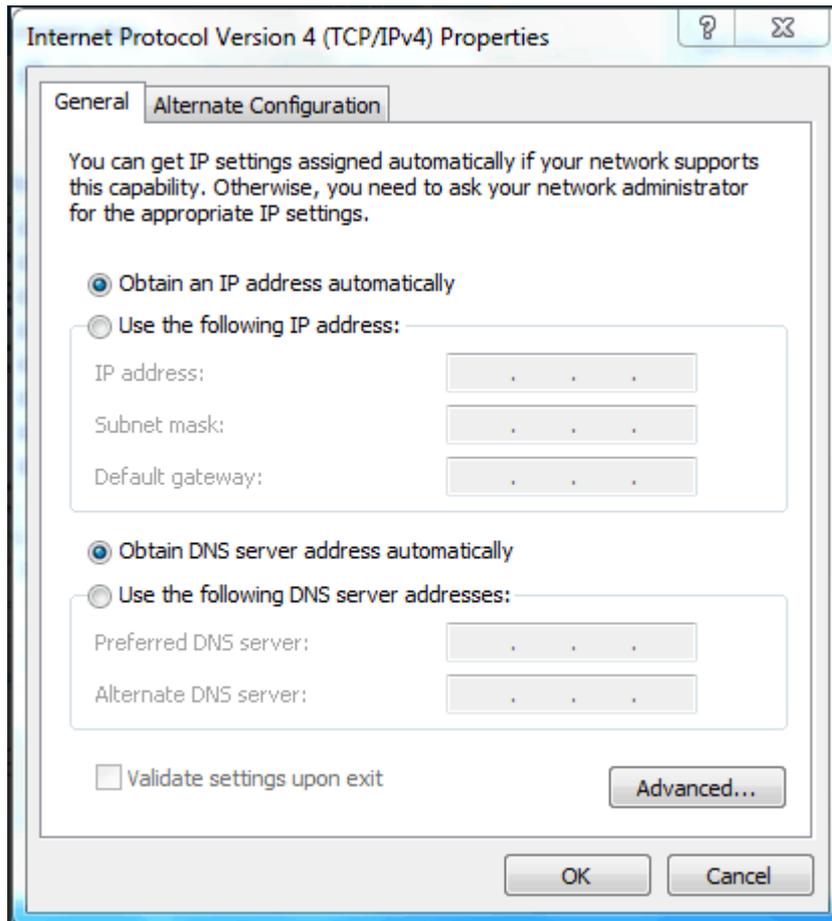
2 require ON

Require ON: when there is a request for data transmission, the ONU automatically initiates dialing, the ONU automatically disconnects. When no data transmission exceeds the set "timeout".

entry "network" --> "WAN" --> "WAN Connection", connection type PPP; connection trigger "require on", input username and password.

The default timeout time is 20 minutes, and users can modify it according to the actual situation

The PC is connected to the ONU through the network cable. It does not need to dial on the PC. It only needs to configure the PC network card to "obtain an ip address automatically" to access the Internet.



## ■ Configuration LAN IP address

### 1 dynamic DHCP configuration

This task configures the local IP address and subnet mask of the ONU, and activates the function of the ONU's DHCP server to dynamically allocate IP address for the devices connected by the LAN entry “Network” --> “LAN” --> “DHCP server”

Status | **Network** | Security | Application | Administration | Help

WAN

LAN

**DHCP Server**

RA Service

DHCP Server(IPv6)

Prefix Management

Port Service(IPv6)

PON

Routing(IPv4)

NOTE: 1. The DHCP Start IP Address and DHCP End IP address should be in the same subnet as the LAN IP.

LAN IP Address

Subnet Mask

Enable DHCP Server

DHCP Start IP Address

DHCP End IP Address

Assign IspDNS

DNS Server1 IP Address

DNS Server2 IP Address

DNS Server3 IP Address

Default Gateway

Lease Time  sec

Allocated Address

MAC Address	IP Address	Remaining Lease Time	Host Name	Port
There is no data.				

Submit Cancel

The description of this page parameter:

function	description
IP address/ subnet Mask	The IP address/subnet mask corresponding to the ONU Local Maintenance Page.
Enable DHCP server	Open the DHCP server function
Start IP address	The starting address of the dynamic IP address assigned by the DHCP server to the terminal device ,it must be the same network segment as the IP address of the ONU
ending IP address	The ending address of the dynamic IP address assigned by the DHCP server to the terminal device ,it must be the same network segment as the IP address of the ONU
Assign IspDNS	Close the DNS server assign function
Default Gateway	Open the Gateway server assign function
Lease Time	IP address lease period

## ■ security

### 1 MAC address filtering

With this operation, legal computers can normally access Internet connection services by setting MAC address filtering, or illegal computers can not access Internet connection services. A computer may have multiple IP addresses, but the MAC address is unique. MAC address filtering can effectively control the access rights of

computers in the network.

entry “security” --> “MAC filter” --> “MAC filter” 。

The description of this page parameter:

function	description
enable	Open the MAC filter function
mode	blacklist: A data packet that it meets this rule will be discarded whitelist: A data packet that it meets this rule will be allow only
Source MAC address	Source MAC address that it need to filter, This parameter cannot be null
Destination MAC address	Destination MAC address that it need to filter, This parameter cannot be null

## ■ Diagnostic testing

### 1 Ping test

By configuring the Ping test, the link status of the device network can be tested.

entry “Administration” --> “Diagnosis” --> “Ping Diagnosis” 。

The description of this page parameter:

function	description
IP address or host name	the destination ip address or host name of required Ping test
Egress	The destination packet sending interface selection

## ■ Application settings

### 1 Virtual Host Settings

With this operation, the virtual host can be configured to allow the WAN side as a client to access the LAN side server.

entry “Application” --> “Port Forwarding” --> “Port Forwarding” 。

Status | Network | Security | **Application** | Administration | Help

MultiCast  
BPDU  
DNS Service  
Port Forwarding  
**Port Forwarding**

Enable

Name

Protocol TCP

WAN Host Start IP Address

WAN Host End IP Address

WAN Connection

WAN Start Port  (1 ~ 65535)

WAN End Port  (1 ~ 65535)

LAN Host IP Address

LAN Host Start Port  (1 ~ 65535)

LAN Host End Port  (1 ~ 65535)

Add

Enable	Name	WAN Host Start IP Address	WAN Start Port	LAN Host Start Port	WAN Connection	Modify	Delete
	Protocol	WAN Host End IP Address	WAN End Port	LAN Host End Port	LAN Host Address		
There is no data, please add one first.							

中文  
Help  
Logout

The description of this page parameter:

function	description
Enable	enable virtual host configuration as required
name	Items must be configured, where you need to enter a name, such as FTP Server
protocol	Must configure items, optional TCP、UDP、TCP AND UDP
WAN Host Start IP Address/WAN Host end IP Address	If you need to restrict external devices access to servers on LAN side, you can configure IP address segments to restrict access. If not configured here, it means that all external devices are allowed to access LAN-side servers.  Optional configurations.
WAN connection	Must configure items,  WAN connection associated with this virtual host
WAN Start Port / WAN end Port	Must configure items  If you need to restrict external devices access to LAN side server through ports, you can configure the start port and the end port to restrict access ports.  If the port is not limited, the start port is set to 1 and the end

	<p>port is set to 65535.</p> <p>Configuration example: Both start and end ports are 2020, which means that only external devices are allowed to access LAN side servers through port 2020.</p>
LAN Host IP Address	The IP address of the LAN side server, through which the ONU maintains a connection with the LAN side server.
Virtual host port	<p>Must configure items</p> <p>This must be the same as the port settings on the LAN side server</p> <p>If the start port number and the end port number on the LAN side server are 21, then the port number is 21.</p>

## ■ device administration

### 1 WEB user management

you can modify the user login password on this page

entry “Administration” --> “User Management” --> “User Management” 。

The screenshot shows a web management interface with a top navigation bar containing: Status | Network | Security | Application | Administration | Help. On the left, a sidebar menu includes: User Management (selected), Login Timeout, System Management, Diagnosis, Loopback Detection, and Led Control. The main content area is titled 'User Management' and contains the following fields and controls:

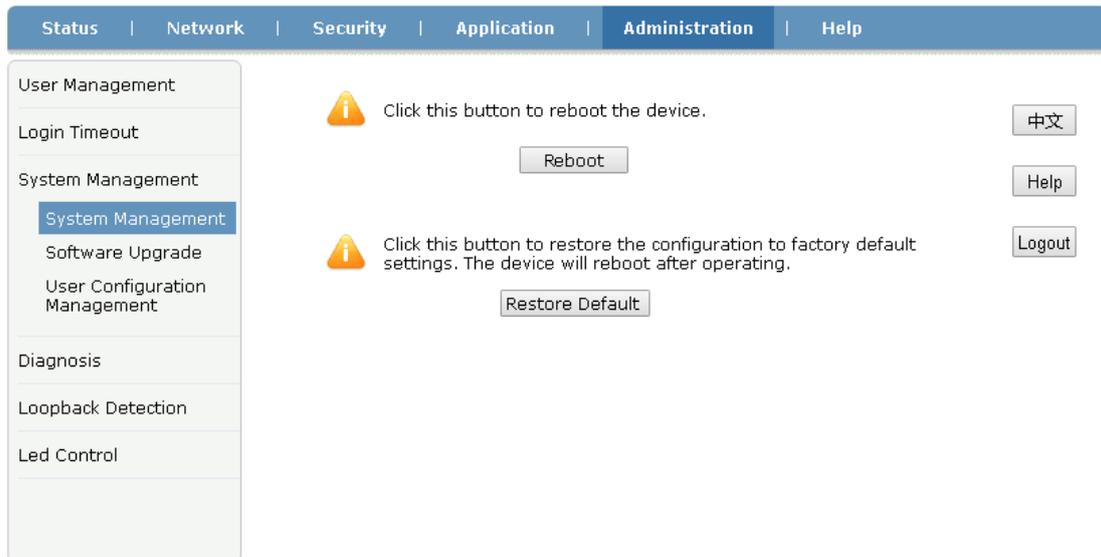
- User Privilege:  Administrator,  User
- Username:
- Old Password:
- New Password:
- Confirmed Password:

On the right side of the form, there are three buttons: 中文, Help, and Logout. At the bottom of the page, there are two buttons: Submit and Cancel.

### 2 device factory default configuration

you can set up to restore the device to factory settings on this page,

entry “Administration” --> “System Management” --> “System Management” ,click “Restore Default” bottom.

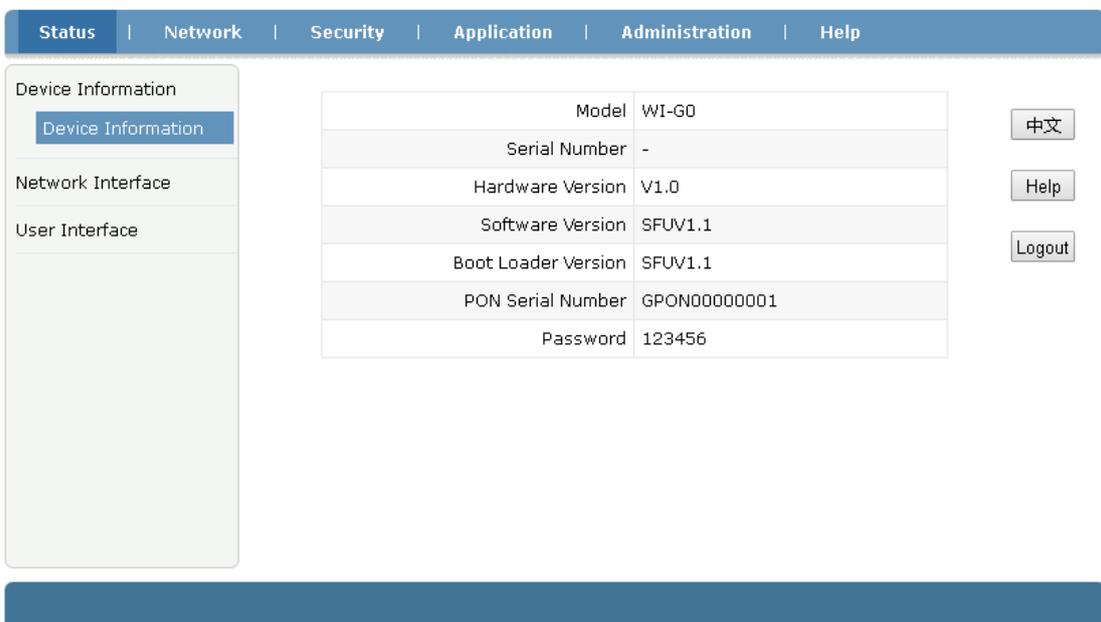


## ■ View device status

The “status” provides the functions of querying the software and hardware information, interface information, broadband service and voice service .

### 1 View device information

entry “Status” --> “Device Information” --> “Device Information” 。 You can view the device model, hardware version, software version and so on.



### 2 View Network Interface Information

entry“Status” -->“Network Interface”-->“PON Inform” 。the registration information of ONU on OLT, optical module optical input power and other information can be viewed.

[Status](#) | [Network](#) | [Security](#) | [Application](#) | [Administration](#) | [Help](#)

Device Information

Network Interface

  WAN Connection

**PON Inform**

User Interface

GPON State	Init State
Optical Module Input Power(dBm)	--
Optical Module Output Power(dBm)	--
Optical Module Supply Voltage(uV)	3341000
Optical Transmitter Bias Current(uA)	0
Operating Temperature of the Optical Module(°C)	14

[中文](#)

[Help](#)

[Logout](#)

[Refresh](#)

click “WAN Connection” , You can view WAN connection information created by users.

[Status](#) | [Network](#) | [Security](#) | [Application](#) | [Administration](#) | [Help](#)

Device Information

Network Interface

**WAN Connection**

  PON Inform

User Interface

Type	PPPoE
Connection Name	ppp
IP Version	IPv4
NAT	Enabled
IP	0.0.0.0
DNS	0.0.0.0/0.0.0.0/0.0.0.0
IPv4 Connection Status	Unconfigured
IPv4 Online Duration	0 sec
Disconnect Reason	NO Carrier
WAN MAC	00:d0:d0:00:00:01

[中文](#)

[Help](#)

[Logout](#)

[Refresh](#)

### 3 Viewing User Interface Information

entry “Status” --> “User Interface” --> “Ethernet ” . You can view the data flow statistics of the LAN interface of the ONU.

Device Information

Network Interface

User Interface

Ethernet

Ethernet Port	LAN1
Status	Up/100Mbps/Full Duplex
MAC Address	00:d0:d0:00:00:01
Bytes Received	852093
Packets Received	6828
Unicast Packets Received	5671
Multicast Packets Received	1056
Error Packets Received	0
Discard Packets Received	0
Bytes Sent	9685670
Packets Sent	8660
Unicast Packets Sent	8649
Multicast Packets Sent	11
Error Packets Sent	0
Discard Packets Sent	0

中文

Help

Logout

## 7、Reminder:

- ▲ The ownership right of ONU refers to the agreement signed by the user when conducting business.

### Environmental requirements

- ▲ Please put the ONU in a well ventilated environment to avoid direct sunlight.
- ▲ Please keep the ONU dry and ventilated to avoid water shower.
- ▲ Do not place anything on the ONU, lest the ONU be damaged by extrusion deformation.
- ▲ Do not place the ONU near the source of heat or water.
- ▲ When placing a ONU, stay away from appliances with strong electric or magnetic fields, such as microwave ovens.

### Cleaning instructions

- ▲ Before cleaning, please disconnect the power supply and pull out all cables connected to the ONU.
- ▲ Do not use liquid or spray cleaning, use a soft dry cloth to wipe.

### Environmental protection

- ▲ Do not discard the abandoned ONU at will.
- ▲ Please abide by local decrees with using the ONU and support recycling activities.



## 8、 Common problem

Q: fail to open WEB page?

A: Make sure that the IP address of PC is configured correctly. It is recommended to configure the IP address and mask of PC in a static way. Then open the browser and enter : HTTP: //192.168.1.88/, and Enter.

Q: When the power is turn on, the LAN indicator LED turn off always?

A: Indicator LED indicates that the Ethernet connection of the corresponding LAN interface is abnormal. Please check whether the network equipment connected to this interface is powered on normally and ensure the normal connection of the Ethernet cable. You can use the UTP cable to connect the two LAN interfaces directly to check whether the ONU and cable are normal.

Q: When the power is turn on, the PON indicator LED turn off always ?

A: The indicator LED indicates that the PON link is not established. First, ensure that the power supply of the ONU is normal and the LOS indicator LED is off. Please contact the operator's operation and maintenance personnel for this status.

Q: Restore factory settings?

A: Press the reset button with a pin and hold it for more than 5 seconds.

Q: Can't access the Internet?

A: Please check whether the connection of optical fiber and network cable is normal. Make sure that PON LED is always on and the LAN indicator LED is always on or flickering. Or contact operator's operation and maintenance personnel.

## Description of the content of harmful substances in products

In order to reduce environmental pollution and protect the earth, it is declared that the terminal products produced. conform to the standard SJ/T11364 for restricting the use of harmful substances in electronic and electrical products.

This statement is based on what we know at present. As the conditions of use about ONU are beyond our control, Does not guarantee the use of this information explicitly or implicitly, and does not assume any responsibility.

Specific harmful substance content status, please refer to "product harmful substance content status statement"

product harmful substance content status statement:

Name	Toxic ,harmful elements and substances					
	(Pb)	(Hg)	(Cd)	(Cr/Vi)	(PBB)	(PBDE)
Metal parts	X	O	O	O	O	O
PCBA	X	O	O	O	O	O
Cable and Cable	X	O	O	O	O	O

Components						
Plastic and Polymer Components	O	O	O	O	O	O
Packaging materials and components	O	O	O	O	O	O
<p>standard: SJ/T11364。</p> <p><b>O:</b> It indicates that the content of the harmful substance in all homogeneous materials of the component is below the limit specified in GB/T 26572.</p> <p><b>X:</b> It means that the content of the harmful substance in at least one homogeneous material of the part exceeds the limit stipulated in GB/T 26572.</p> <p>note:</p> <ol style="list-style-type: none"> <li>1、 This table shows that the products supplied may contain these substances, but these information may be updated with the development of technology.</li> <li>2、 The reason why this product is marked "X" is that there are no alternative technologies and components at this stage.</li> </ol>						
<p>The right picture shows the environmental protection lifetime of this product. Some replaceable parts will have a different lifetime pasted on the product. The environmental protection life of this product is only applicable to the work of the product under the conditions specified in the product manual.</p>						



To Users:

The warranty card is an important proof of purchase for the end user to get the after-sales service , please properly preserve it.

To distributors:

The warranty card is valid after the complete sales information are filled in and stamped by retailers ( please fill in purchase date, vendor and other related informations.)

Warranty Information:

1. The warranty period: one year warranty and lifetime maintain.
2. Warranty instruction: The time is subjected to the date on fragile stick of this machine, defective problem come in normal use will do Free maintenance during warranty period.
- 3.The following conditions must be payed for maintenance, and depending on the circumstances to be charged
  - a. The warranty period is expired
  - b.Fragile stickers of machine is damaged,or can not identify date.
  - c. disassembly without permission
4. The company reserve all the right of the final explanation.

NOTE : the further use and configuration about this ONU,please refer to User's guide on the disk;

The help information on the WEB,IP :192.168.1.88,  
user name:admin,password:admin;

3)Contact customer service

(Please keep this page and cut form under the dashed line and return to the company)

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Please fill in the below form:

User Name		Tel	
Date of purchase		fax	
Product Type (P/N)			
Product Number(S/N)			
Fault Description:			

Notes: This warranty card is important proof of purchase for buyers, please take the invoice and keep this well at the same time.