DIGISOL®

Manufacturing Since 1986

Quick Installation Guide

XPON ONU Router with 1 PON and 1 Gigabit LAN Port

DG-GR6010

V2.0
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Overview

1:1 Product Description

DG-GR6010 ONU meets telecom operators FTTO (office), FTTD (Desk), FTTH (Home) broadband speed, SOHO broadband access, video surveillance and other requirements to design an GEPON / GPON Ethernet network. It is based on mature and stable, cost-effective EPON & GPON technology. It is highly reliable, easily manageable, provides configuration flexibility and good quality of service (QoS) guarantees. They are fully compliant with GPON and EPON technical regulations such as ITU-T G.984.x & IEEE802.3ah. Dual mode ONU can detect and exchange PON mode automatically.

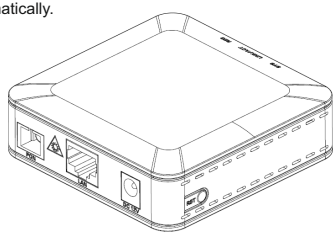


Figure 1

1:2 Application Chart

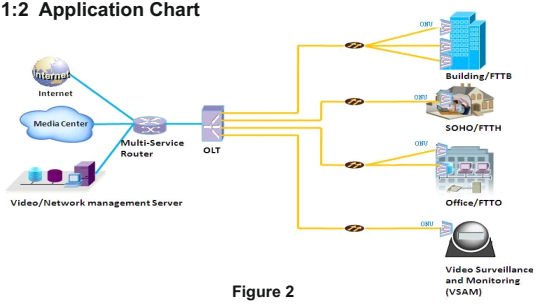


Figure 2

1:3 Technical Parameters

Parameter Name	EPON	GPON
PON	SC single-mode/ single-fiber.	SC single-mode/ single-fiber.
	Symmetric 1.25Gbps.	Uplink 1.25Gbps, downlink 2.5Gbps
Wavelength	Tx 1310nm, Rx 1490nm	
Sensitivity	<-28dBm(PX20+)	<-28dBm(CLASS B+)
Overload	>-3dBm(PX20+)	>-8dBm(CLASS B+)
Optical Type	SC/UPC	
Interface Type	1*10/100/1000Mbps Auto adaptive Ethernet interfaces, Full/Half Duplex, RJ45 connector	
Indicators	3, For SYS, LINK/ACT, REG.	
Ambient temperature	-30 ~ +70°C	
Ambient humidity	10% ~ 90% (non-condensing)	
Store temperature	-30 ~ +70°C	
Store humidity	10% ~ 90% (non-condensing)	
Dimension(L x W x H)	82mm×82mm×25mm	
Power	12V,0.5A	
Power Consumption	≤4W	
Gross weight	Around 230g	

1:4 Package Content

Contents	**Quantity**
ONU	1 PCS
Power Adapter	1 PCS
QIG	1 PCS

Installation

2:1 Installation Requirements

To avoid equipment damage caused by improper use and personal injury, please observe the following precautions:

- Do not place the device near water or in damp places, in order to prevent water or moisture from entering the device.
- Do not place the device in an unstable place, avoid falling damage to equipment.
- Make sure that the supply voltage of the device matches the required voltage value.
- Do not open the equipment chassis without permission.
- Unplug before cleaning the power plug; prohibit the use of liquid cleaning.

Installation Environment Requirements
ONU equipment must be installed in the interior and ensure the following conditions are meet:

- Confirmation at the ONU installation site to have sufficient space to facilitate cooling machine.
- ONU suitable operating temperature of -10°C~55°C, humidity 10% to 90%.

Electromagnetic Environment
ONU equipment in use can be affected by external electromagnetic interferences, such as radiation and conduction through the impact on the device, this should note the following:

- Device workplace should avoid radio transmitters, radar stations, and high-frequency interference from power equipment.
- Users cable typically require alignment indoors if outdoor lightning traces measures should be taken.

Equipment Installation
ONU product is a fixed configuration cassette equipment, site equipment installation is relatively simple. Simply install the device on a specified place, connecting the upstream fiber subscriber line connections, connect the power cable. Actual operation is as follows:

1. **Installed on the desktop**

Place the machine on a clean bench, this installation is relatively simple, you can observe the following operation:

- Ensure the smooth workbench.
- There should be enough space around the device for heat dissipation.
- Do not place objects on the device.

2. **Mounted on the wall**

- Observation ONU equipment chassis consist two cruciform recess, in accordance with the position of the groove, installed two screws in the wall.
- The original selected two mounting screws gently snap into recesses aligned.
- Slowly let go, so that the device under the support of the screw hanging on the wall.

2:2 Panel Lights

LED	Mark	Status	Description
Registration	REG	On and Green in colour	The device is registered to the PON system
		Off / Red in colour	Device is not registered to the PON system
		Blink	Device registration is incorrect
		Fast Blink	Port is sending or/and receiving data
Interface	LINK/ ACT	On	Port is connected properly (LINK)
		Off	Port connection exception or not connected
		Blink	Port is sending or/and receiving data (ACT)
System	SYS	On / Off	System is not running or fatal error
		Blink	Normal running

Web Management

DG-GR6010 provides simple Web management functions including Device Information, modification of LAN Management IP address, LOID and Password, Configuration File Backup and Restore, Firmware Upgrade etc...

NOTE:
Detailed ONU Configuration is possible via CTC OAM Protocols on the OLT.

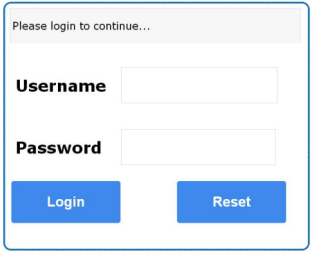
3:1 Default configuration

The following is the default device configuration information.

- Local (LAN access) Username: **admin** / Password: **stdONU101**
- LAN port management IP address: **192.168.1.1/24**

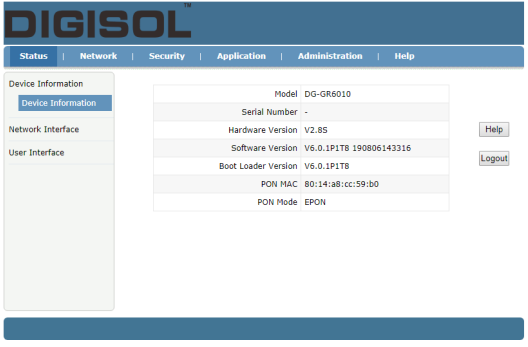
3:2 Default configuration

Figure 3 Web Login



Web login default username: **admin** / Password: **stdONU101**

Figure 4 Device Information

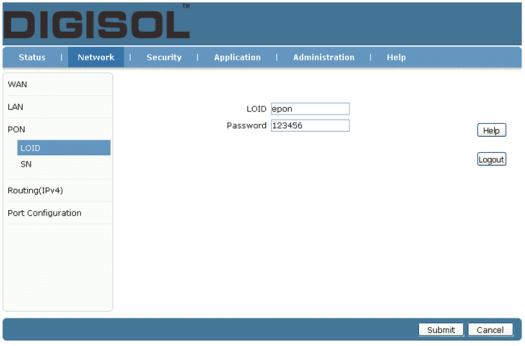


Device Info Menu displays the current device base informations, including Hardware Version, Software Version, Boot Loader Version.

Note:

1. All the device information may be changed, the received device shall prevail.

Figure 5 Modify Loid and Password



LOID Menu displays the current device LOID and Password informations.
LOID: 0-24 bytes. **Password:** fixed 10 bytes.

Note:

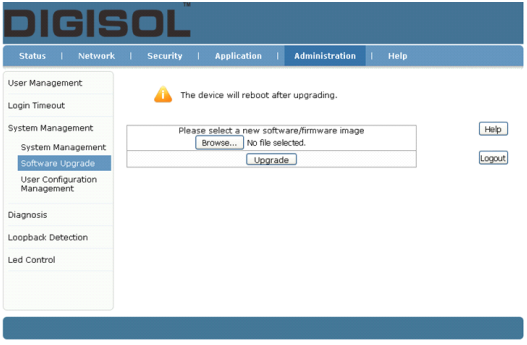
1. Usually no need to modify the Version and Vendor Product Code information, otherwise it may lead to ONU registration problems.
2. All the changes to take effect in the equipment after the restart.

Figure 6 Reboot/ Restore Default

Reboot: The operation to reboot the device.
Restore Default: The operation to restore the device to its factory configuration.

Note:
1. Pressing the RST button for 10 seconds or more will reset the ONU to its default settings.
2. Pressing the RST button for a shorter duration will simply reboot the ONU.

Figure 7 Upgrade



Firmware upgrade Menu displays the current equipment upgrades related information.

Figure 8 Backup/ Restore Configuration

Backup Configuration: The operation to backup configuration from the device.
Restore Configuration: The operation to restore configuration from a configuration file.

Troubleshooting

1. After power on, all the LEDs are lit?

Reasons:

1) Power connection errors.
2) Power is not normal.

Solution:

1) Check that the power cable is connected.
2) The rear panel of the power supply is turned on.

2. LINK / ACT LED does not turn on?

Reasons:

1) Network cable is damaged or loose connection.
2) Cable type error.
3) Long lines outside the allowable range.

Solution:

1) Replace the network cable, and pay attention to the standard Ethernet cable must be parallel or crossing lines.

3. After some time device stop working?

Reasons:

1) Power supply is not working properly.
2) The equipment from overheating.

Solution:

1) Check if there is contact with abnormal voltage is too high or too low.
2) Check the ambient conditions, vents are normal ventilation.

4. REG LED flashes?

Reasons:

1) Fiber failure.
2) Central office equipment failure.

Solution:

1) Inspect fiber is connected properly, is connected to the correct connector, optical power is normal.
2) Contact your operator.

WARRANTY

This Product is covered under DIGISOL Warranty program backed by DIGISOL Service Center. To avail this Warranty offer, customer needs to contact DIGISOL's Technical Assistance Center for the same. You may be asked to provide proof of purchase of product for warranty claim of defective product. Please refer website www.digisol.com for the detailed support terms & conditions and support process.

Warranty Policy

1. Hardware Warranty : Hardware warranty period shall be limited up to Three years. External Power Adapter shall carry One year warranty only against manufacturing defects. Any repair or replacement will be rendered by DIGISOL at its Service Center only.
2. Software Warranty : DIGISOL issues this Limited Software Warranty that the software portion of the product ("Software") will substantially confirm to DIGISOL's then current functional specifications for the software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of one year ("Software Warranty period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation.
3. Governing Law: This warranty shall be governed by Indian Laws.
4. Warranty shall subject to the terms & conditions specified in the DIGISOL Product Warranty policy displayed on www.digisol.com
5. To avail and activate warranty for your product.
   Kindly register your product by calling us @1800 209 3444

DIGICARE
helpdesk@digisol.com
1800 209 3444

3 YEARS WARRANTY

NOTES

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