Quick Installation Guide

GEPON/GPON ONU 300Mbps Wi-Fi Router with 1 PON, 1 GE, 3 FE and 2 FXS Port

DG-GR4342L

V1.1
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Overview

1:1 Product Description

Thank you for choosing DG-GR4342L ONU. The terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. The device is based on mature GPON and Gigabit EPON technology, which has high ratio of performance to price, and the technology of 802.11n WiFi (2T2R), Layer 2/3, and high quality VoIP as well. They are highly reliable and easy to maintain, with guaranteed QoS for different service. And it is fully compliant with GPON and EPON technical regulations such as ITU-T G.984.x & IEEE802.3ah. DG-GR4342L is a dual mode ONU which can detect and exchange PON mode automatically.

Figure 1

1:2 Application Chart

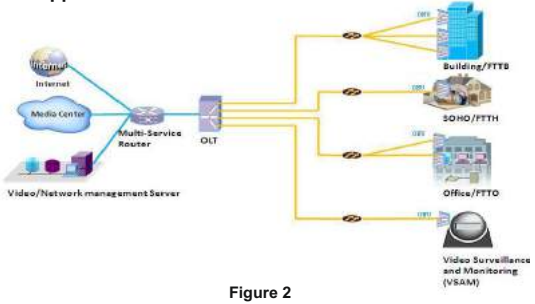


Figure 2

1:3 Technical Parameters

Technical item	DG-GR4342L
PON interface	1 GPON/EPON connector, SC single-mode/single-fiber, GPON: uplink 1.25Gbps, downlink 2.5Gbps; EPON: symmetric 1.25Gbps
Wavelength	Tx:1310nm, Rx:1490nm
Optical interface	SC connector
LAN interface	1* 10/100/1000Mbps and 3*10/100Mbps auto adaptive Ethernet interfaces (RJ45). 2* POTS (RJ11).
Wireless	Compliant with IEEE802.11b/g/n, 300Mbps, 2T2R two external antennas.
LED	13 indicators for status of POWER, PON, LOS, WAN, WIFI, POTS, LAN, WPS and USB.
Operating condition	Temperature: -5°C ~ +55°C Humidity: 10% ~ 90% (non-condensing)
Storing condition	Temperature: -30°C ~ 60°C Humidity: 10% ~ 90% (non-condensing)
Power supply	DC 12V/1.5A
Power consumption	≤10W
Dimension	205mm×140mm×37mm (L×W×H)
Net weight	0.34Kg

1:4 Package Content

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

1:5 Panel Description

Figure 3

Name	Function
PON	Connect PON port with internet by SC type, single mode optical fiber cable.
FXS 1 / 2	Connect the telephone with FXS port by telephone wire. If you only have one telephone, you should use FXS1 port.
ETH1/iTV/3/4	Connect PC with ONU Ethernet port by RJ-45 cable.
WPS (Wireless Pair)	Press down Wi-Fi pair button for WPS function.
WiFi	Press down Wi-Fi button to enable/disable Wi-Fi function.
RST	Press down reset button to make the device restart and recover from the factory default settings.
USB	External USB port, used to connect to USB storage device.
DC12V	Connect with power adapter.
ON/OFF	Turn on/off power supply.

1:6 Indication Panel

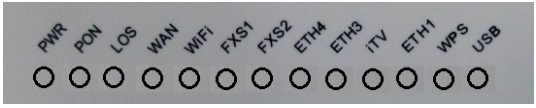
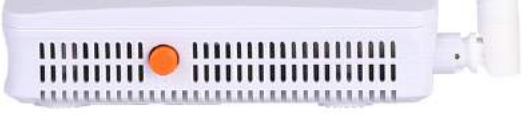


Figure 4

Name	Status	Description
PWR	OFF	Power is not supplied
	ON	Power is supplied
PON	OFF	Device is not registered to EPON/GPON OLT
	ON	Device has been registered to EPON/GPON OLT
	FLASH	Device registered incorrect
LOS	OFF	Rx optical power is normal
	FLASH	Rx optical power is lower than the sensitivity of the optical receiver
WAN	OFF	WAN is ineffective.
	ON	WAN is effective. (Configuration is effective, router WAN connected and IP address, DNS, etc. obtained)
WI-FI	OFF	Device is power off or WiFi is turned off.
	ON	WiFi is turned on.
	FLASH	WiFi is turned on and with ongoing data transmission.
FXS 1/2	OFF	Device is power off or not registered to the soft-switch.
	ON	Device has registered to the soft-switch.
	FLASH	The port is working.
ETH1/ iTV/3/4	OFF	Device is power off or Ethernet link is not established.
	ON	Ethernet link is established but without ongoing data transmission.
	FLASH	The port is ongoing data transmission.

Name	Status	Description
WPS	OFF	Does not use WPS or WPS client is connected (LED turn off after 5 minutes of successful connection).
	ON	WPS client is connected. (LED turn off after 5 minutes of successful connection)
	FLASH	WPS client is connecting.
USB	OFF	Device is power off or USB device is not connected.
	ON	USB device is connected, but without ongoing data transmission.
	FLASH	USB is with ongoing data transmission.

Side Panel



Name	Function
Indicator LED turn on/off	Press down to turn LED on, Pop up to turn LED off.

Installation

2:1 Quick Installation

1. Connecting the optical fiber cable to the unit.
   a) Remove the protective cap of the optical fiber.
   b) Clean the end of the optical fiber with an optical fiber end cleaner.
   c) Remove the protective cap of the ONU optical interface (PON interface). Connect the fiber to the PON port of the unit.

Note: When measuring the optical power before connecting to the ONU, it is recommended to use a PON Inline Power Meter.

While connecting, please note:

- Keep the optical connector and the optical fiber clean.
- Make sure there are no tight bends in the fiber and that the bending diameter is greater than 6cm. Otherwise, the optical signal loss may be increased, to the extent that signal may be unavailable.
- Cover all optic ports and connectors with protective cap to guard against dust and moisture when the fiber is not used.

2. Apply power to the unit. Push the power button.
3. After the device is power ON, Indicators should light up as for normal operation. Check whether the PON interface status LED (PON) is ON continuously. If it is, the connection is normal; otherwise there is either problem of the physical connection or the optical level at either end. This may be caused by either too much or too little attenuation over the optical fiber. Please refer to the LED indication panel section of this installation guide for normal LED activity.
4. Check all signal levels and services on all the communication ports.

Unit Installation Adjustment

Installing the ONU on a horizontal surface (Bench top)
Put the ONU on a clean, flat, sturdy bench top. You must keep the clearance for all sides of the unit to more than 10cm for heat dissipation.
Installing the ONU on a vertical surface (Hanging on a wall)
You can install the ONU on a vertical surface by using the mounting holes on the bottom of the ONU chassis and two flat-head wood screws.

a) Insert the screws into the wall. The screw positions must be in the same horizontal line and the distance between them must be 165mm. Reserved at least 6mm between the screw caps and the wall.

b) Hang the ONU on the screws through the mounting holes.

2:2 Set Up Connection

Set Up Wired Connection

Connect PC with ONU Ethernet port by RJ-45 cable. The PC will receive the IP automatically from the ONU DHCP server in the range of 192.168.1.x/24. Then access the ONU using IP address 192.168.1.1 with username/password: admin

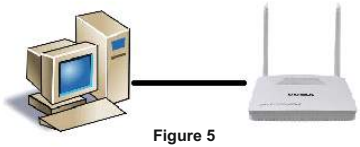


Figure 5

Set Up Wireless Connection

Choose the wireless network name (SSID) "FTTH", default security mode is WPA2 mixed, password is 12345678. The PC will receive the IP automatically from the ONU DHCP server in the range of 192.168.1.x/24. Then access the ONU using IP address 192.168.1.1 with username/password: admin

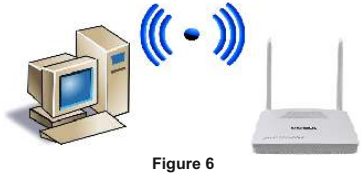


Figure 6

Web Management

DG-GR4342L provides simple Web management functions, including Device Information, modify LAN Management IP address, LOID and Password, Configuration File backup and restore, firmware upgrade etc...

NOTE:
About More ONU Detail Configuration should be configured via CTC OAM Protocols from OLT.

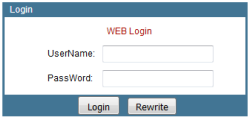
3:1 Default configuration

The following is the default device configuration information.

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

3:2 Default configuration

Figure 7 Web Login



Web login default username: admin, password: admin

Figure 8 Device Information

Device Info Menu displays the current device base information, including Hardware Version, Software Version, Model no.

Figure 9 WAN Connection

Configure the WAN connection as per the ISP specified. Create DHCP/Static/PPPoE connection.

Figure 10 LAN Settings

IP address and Subnet Mask: LAN port IP address and mask

DHCP option: Enable or disable the DHCP server and configure the IP address pool, DNS,etc

NOTE: DHCP server changes takes effect after the device is restarted.

Figure 11 WLAN Settings

WLAN basic displays the current configuration information. Modify these parameters to change WiFi basic features.

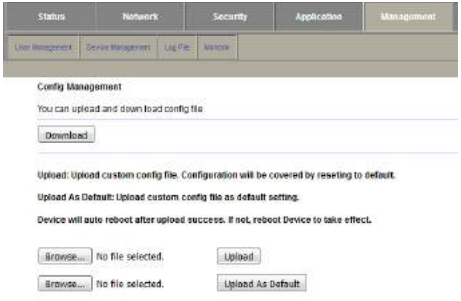
Security is used to set up encryption for each SSID and WPS function.

Figure 12 Device Management

Upgrade

Firmware upgrade Menu displays the current equipment upgrades related information.

Configuration File Management



To download or restore the configuration file.

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

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helpdesk@digisol.com

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3 YEARS WARRANTY

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