



**GEU-0520**

5-Port Gigabit Switch

**GEU-0820**

8-Port Gigabit Switch

**QIG Manual**

V1.0-100900

## **FCC Certifications**



This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

## **CE Mark Warning**



This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

Trademarks:

All trade names and trademarks are the properties of their respective companies.

Copyright © 2010 All Rights Reserved

## **Introduction**

---

GEU-0520 and GEU-0820 are members of LevelOne Unmanaged Switch 2 series which are powerful, high-performance Gigabit Ethernet switches. With 5 or 8 ports capable of 10/100/1000 Mbps auto-negotiation operation (NWay), the switch could automatically negotiate with the connected partners on the network speed and duplex mode. It is ideal for micro-segmenting large networks into smaller, connected subnets for improved performance, enabling the bandwidth demanding multimedia and imaging applications. Moreover, the 10/100/1000Mbps auto-sensing ability provides an easy way to migrate 10/100Mbps to 1000Mbps network. Compared to the shared 10Mbps or 100Mbps networks, the switch delivers a dedicated 10/100/1000Mbps connection to every attached client without bandwidth congestion issue. This switch also supports auto MDI/ MDI-X function. Each port could be used to connect to another switch or hub without crossover RJ-45 cable.

Store-and-forward switching mode promises the low latency plus eliminates all the network errors, including runt and CRC error packets. To work under full-duplex mode, transmission and reception of the frames can occur simultaneously without causing collisions as well as double the network bandwidth. Moreover, Pre-IEEE 802.3az Energy Efficient Ethernet is supported to save power consumption

GEU-0520 and GEU-0820 are plug and play without any software to configure and also fully compliant with all kinds of network protocols.

**Quick Installation Guide**

This section provides unpacking and setup information for the Switch.

**Unpacking**

Open the shipping carton and carefully unpack its contents. The carton should contain the following items:

- One GEU-0520, or GEU-0820 Gigabit Ethernet Switch
- Four rubber feet with adhesive backing
- Wall-mount Kit
- One external power adapter
- QIG Manual

If any item is found missing or damaged, contact your local dealer for a service.

**Installation**

The site where you install the Switch stack may affect its performance. Use the following guidelines when installing the switch:

- Install the Switch in a cool and dry place. See specifications for the acceptable temperature and humidity operating ranges.
- Install the Switch in a site free from strong electromagnetic field generators (such as motors), vibration, dust, and direct exposure to sunlight.
- Leave at least 10 cm of space at the front and rear of the hub for ventilation.
- Install the Switch on a sturdy, level surface that can support its weight. When installing the Switch on a level surface, attach the rubber feet to the bottom of each device. The rubber feet cushion the hub and protect the hub case from scratching.

### **Wall Mounting**

Before you begin, you need 2 wallboard screws to mount the unmanaged switch.

To mount the unmanaged switch to the wall:

1. Determine where you want to mount the unmanaged switch. Verify that the surface is smooth, flat, dry, and sturdy.
2. Drill two pilot holes into the wall surface. The wall-mount slots are two crisscross slots on the bottom panel of the unmanaged switch.
3. Insert a screw into each hole, leaving a gap between the surface and the base of the screw head of at least 0.1 inches (3 mm).
4. Place the unmanaged switch wall-mount slots over the screws and slide the unmanaged switch down until the screws fit snugly into the wall-mount slots.
5. Connect the unmanaged switch to the other devices, as described in the “**Connecting the Equipment**” section.

### **Flat Surface Installation**

To deploy the device on a desktop or other flat surface:

1. Place the unmanaged switch on a desktop near an AC power source.
2. Connect the unmanaged switch to the other devices, as described in the “**Connecting the Equipment**” section.

### **Connecting the Equipment**

This section describes the process for connecting the device to the network.

1. Power down all of the devices you want to connect to the switch.

2. Connect the Ethernet cable to the Ethernet port of a PC, printer, network storage, or other network device.

**NOTE** We recommend using Cat5e or better cable.

Also, do not exceed the maximum cabling distance of 328 feet (100 meters) per segment.

For cable selection, refer to the following table :

Network Speed	Cable Type	Max. Length
10Mbps	Cat. 3, 4, 5 UTP/STP	100 meters
100Mbps	Cat. 5 UTP/STP	100 meters
1000Mbps	Category 5e, 6 UTP/STP	100 meters

3. Connect the other end of the network Ethernet cable to one of the numbered unmanaged switch Ethernet ports.

4. Repeat Step 2 and Step 3 for each device you want to connect to the unmanaged switch.

**CAUTION** Make sure you use the power adapter included with the switch. Using a different power adapter might damage the switch.

5. Connect the power adapter to the power port on the back panel of the unmanaged switch.

6. Power up the devices connected to the switch.

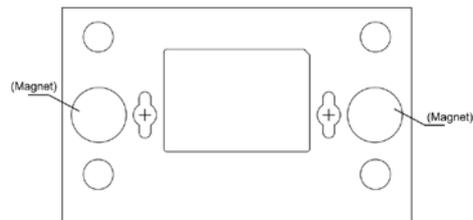
### **Magnet Mounting**

This model support magnet mounting

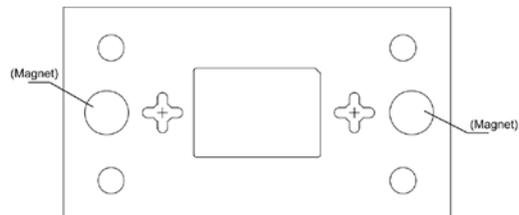
### **Introduction to magnetic mounting parts**

There are two permanent magnets in the bottom of switch, as shown in below figures.

GEU-0520



GEU-0820



### **Installation procedure**

Attach the magnet-mounted device to the specified location. Take care not to get your fingers stuck between because the magnetism is very huge.

**CAUTION**

- Select the installation location carefully. In the case of poor surface, magnet mounting may not be reliable.
- Put the device at a stable place free from vibrations or shocks. Otherwise, personal injuries or equipment damage may occur.
- Avoid installing the device at a high place because personal injuries or equipment damage may occur in case of a falloff.
- Avoid frequently moving the desk-mounted device because such movements may damage the surface coating.
- Keep the front panel of the device facing upwards and the two sides with ventilation holes vertical to the ground, if you want to install the device vertically.
- Pay attention that the weight of external cables should not bring about a falloff, which may result in personal injuries or equipment damage.
- Keep floppy disks and magnetic cards away from magnets to avoid erasure of any information.
- Keep computers and monitors that are easily influenced by magnetic fields away from magnets. Otherwise, faults may occur to these electronic devices.

**Power On**

Plug one end of the power adapter into the power connector on the switch and the other end into the local power source outlet.

After the switch is turned on, the LED indicators will momentarily blink, showing a reset of the system.

**Power failure**

If a power failure occurs, unplug the switch. When power is resumed, plug the switch back in.

**Key Features**

---

- Complies with 10BASE-T specifications of the IEEE802.3 standard
- Complies with 100BASE-TX specifications of the IEEE802.3u standard
- Complies with 1000BASE-T specifications of the IEEE802.3ab standard
- 5 or 8\* 10/100/1000Mbps RJ-45 Nway ports
- Supports MDI/MDI-X auto crossover
- Supports full and half duplex operation on all ports
- Supports back-pressure (half duplex) and full duplex flow control (IEEE 802.3x)
- Wire-speed packet filtering and forwarding rate
- Store-and-forward architecture filters fragment & CRC error packets
- Supports extensive LED indicators for network diagnostics
- Supports IEEE 802.3az
- Supports IEEE 802.1p QoS

## LEDs Definition

The switch contains one power LED for the device, Link/Act LED for each port that shows the activities and information of the ports.

Please refer to the following table for LEDs definition:

### GEU-0520



### GEU-0820



LED	Status	Operation
Power	Steady Green	The switch is powered on
	Off	The switch is powered off
Link/ ACT	Steady Green	Valid port connection
	Blinking Green	Valid port connection and there is data transmitting/ receiving
	Off	Port disconnected

### Product Specifications

<b>Standard</b>	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3ab 1000BASE-T IEEE802.3x full duplex flow control IEEE802.3az
<b>Interface</b>	5 or 8* 10/100/1000 Mbps RJ-45 ports
<b>Network Data Rate</b>	10/100/1000 Mbps Auto-negotiation
<b>Transmission Mode</b>	10/100Mbps: Full-duplex, Half-duplex 1000Mbps: Full-duplex
<b>Buffer Memory</b>	128K bytes
<b>MAC Address Table</b>	8K
<b>Jumbo Frame</b>	9K bytes
<b>Temperature</b>	Operating: 0°C ~ 40°C (32°F ~104°F) Storage: -10°C ~ 70°C (14°F ~158°F)(Metal)
<b>Humidity</b>	Operating: 10% ~ 90% RH, non-condensing Storage: 5%~90% RH, non-condensing
<b>LED Indications</b>	System: Power Ports: Link/Act
<b>Power Supply</b>	External power adapter 5V/1A
<b>Dimensions</b>	GEU-0520: 121*75*26mm GEU-0820: 154.5*85*26mm
<b>Emission</b>	FCC, CE, VCCI Class A