level one

GEP-1022

10-Port Gigabit PoE Switch, 8 PoE Outputs, 2 x SFP

User's Manual

FCC Warning

This device has been tested and found to comply with limits for a Class A digital device, pursuant to Part 15 of 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 and radiates radio frequency energy and, if not installed and used in accordance with the user's manual, it may cause interference in which case users will be required to correct interference at their own expenses.

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Energy Saving Note of the Device

This power required device doesn't support Standby mode operation. For energy saving, please remove the power cable to disconnect the device from the power circuit. Without removing power cable, the device will consume power from the power source.

WEEE Warning

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste; WEEE has to be collected separately.

Package Contents

Thank you for purchasing our GEP-1022 PoE Switch. Before installation, please check the contents of your package for the following parts:

1. GEP-1022 x 1
2. User's Manual x 1
3. Power Cord x 1
4. Rubber Feet x 4

Product Introduction

The GEP-1022 is a 8-Port 10/100/1000Mbps ports IEEE802.3af/at Power over Ethernet + 2-Port 1000Mbps SFP Interface with inner power system.

Following the IEEE 802.3at/af standard makes the GEP-1022 able to deliver Gigabit speed data and up to 30 watts of power per port to 8 PoE powered devices (PDs) with a combined power output budget 60/85/115 watts.

The two mini-GBIC slots built in the GEP-1022 are compatible with the 1000BASE-SX/LX SFP (Small Form-factor Pluggable) fiber transceiver, uplinked to backbone switch and monitoring center in long distance. The distance can be extended from 550 meters (multi-mode fiber) to 120 kilometers (depends on the specification of fiber transceiver). They are well suited for applications within the enterprise data centers and distributions

GEP-1022 offers 8 PoE interface that is ideal for small business and workgroups requiring deploying the PoE for the wireless AP, IP-based surveillance camera or IP phones in any places easily, efficiently and cost-effectively.

Key Features

∘ Complies with IEEE 802.3, 10BASE-T, IEEE 802.3u, 100BASE-TX, IEEE802.3ab, 1000BASE-T, IEEE 802.3z, 1000BASE-SX/LX, IEEE 802.3az Energy Efficient Ethernet
∘ Complies with IEEE802.3af/at Standard
∘ 8-Port supports Power over Ethernet (Port 1~8)
∘ Built-in two 1000BASE-SX/LX mini-GBIC slots (Port 9~10)
∘ Supports PoE power up to 30 watts for each PoE port
∘ Internal Power 65/90/120Watts
∘ Auto-detection and protection of non-standard PoE device
∘ Over Current Protection / Over Temperature Protection / Over Voltage Protection
∘ Remote power feeding up to 100meters
∘ Made of metal and desktop size

Hardware Installation

1. Plug the included power cord into device and the other end into an electrical socket. Then, **"PWR"** LED is on.
2. Connect your IEEE802.3af/at compliant Powered Devices (PD) to port 1 to 8 and the Switch will automatically supply power through these ports. Now, "**LAN**" and "**PoE**" LED indicator are on.

Note: *If you connect a legacy device that is not PoE compatible, the Switch will not deliver power to the legacy device. This feature allows you to freely and safely mix legacy and PoE compatible devices on your network*

3. Ensure Powered device is on. If not, please make sure all Ethernet cables are connected correctly and tightly.

Front Panel
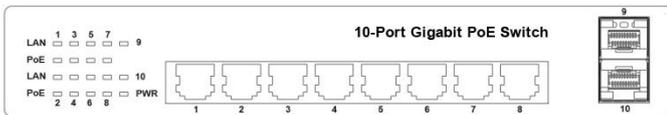
Rear Panel

Grounding (Recommended)

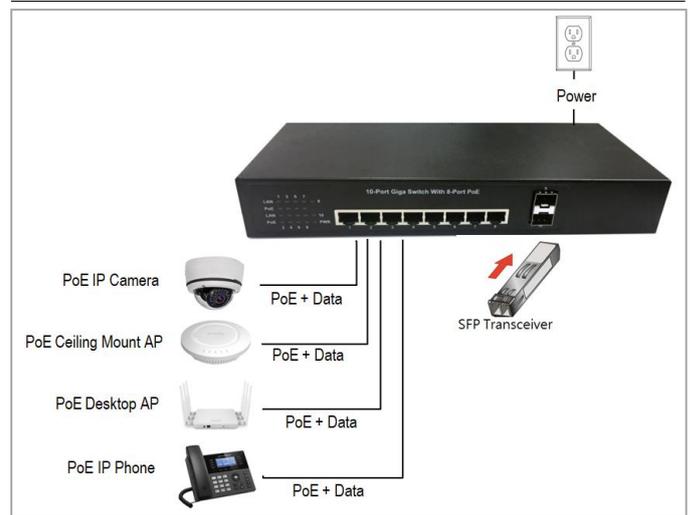GEP-1022 provides ancillary grounding to enhance ESD protection.

1. Loosen the ground screw and secure a ground wire (not included) to the grounding point.
2. Secure the other end of the ground wire to a grounding block or other grounded structure.

❖**SFP Transceiver installation: The SFP transceivers are hot-pluggable and hot-swappable. You can plug in and out the transceiver to/from any SFP port without power down.**

LED Indicators

LED Indicator	Color	Status	Function
PWR	Green	ON	Switch is on and correctly powered
LAN (Port 1~8)	Green	ON	Port is connected to device at 1000Mbps
	Yellow	ON	Port is connected to device at 10/100Mbps
	Green or Yellow	Flashing	Port is active for data sending/receiving
LAN (Port 9~10)	Green	ON	SFP Transceiver is connected
	Green	Flashing	Port is active for data sending/receiving
PoE	Yellow	ON	PoE function is enabled
	n/a	OFF	PoE function is disabled. It acts as a regular LAN port.

Application Diagram

Product Specification

Standard	IEEE 802.3 10Base-T
	IEEE802.3u100Base-TX / 100Base-FX
	IEEE 802.3ab/z 1000Base-T/ -SX/LX
	IEEE 802.3az Energy Efficient Ethernet
	IEEE 802.3x flow control and back pressure
	IEEE 802.3af Power over Ethernet
	IEEE 802.3at Power over Ethernet Plus
Copper Ports	8 10/100/1000BASE-T RJ45, auto-MDI/MDI-X
SFP Interface	2 x 1000BASE-SX/LX
Switch Architecture	Store-and Forward
Switch Fabric	20Gbps / no-blocking
Address Table	8K entries, Automatic source address learning
Share Data Buffer	128KB
Flow Control	IEEE 802.3x pause frame for full-duplex Back pressure for half-duplex
Jumbo Frame	9K bytes
Filtering/Forwarding Rates	10Mbps port-14,880pps
	100Mbps port-148,800pps
	1000Mbps port-1,488,000pps
PoE Standard	IEEE 802.3af Power over Ethernet
	IEEE 802.3at Power over Ethernet Plus
PoE Power Supply Type	End-span
PoE Power Output	Per Port 56V DC, Max. 30 watts
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Budget	60/85/115 watts
LED Indicators	PWR / LAN 1~10 / PoE 1~8
Dimension (W x H x D)	280x122x43mm
Power Requirement	100~240V AC, 50/60Hz
Certification	FCC/CE
Operating Environment	Operating temperature: 0 – 40°C
	Storage temperature: -20 – 70°C
	Humidity: 20 – 95% non-condensing

Note: *The device is a power-required device, meaning it won't work till it is powered. If your networks should be active all the time, please consider using UPS (Uninterrupted Power Supply) for your device. It will prevent you from network data loss or network downtime. In some areas, installing a surge suppression device may also help to protect your GEP-1022 from being damaged by unregulated surge or current to the GEP-1022.*