NICGIGA NIC-GS0820P-EU

NICGIGA 10-Port Gigabit PoE+ Switch (Model NIC-GS0820P-EU) User Manual

Model: NIC-GS0820P-EU

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your NICGIGA 10-Port Gigabit PoE+ Switch. This unmanaged switch features 8 Power over Ethernet (PoE+) ports and 2 Gigabit uplink ports, designed for reliable network expansion and powering compatible devices such as IP cameras, IP phones, and wireless access points. Its robust metal housing and fanless design ensure quiet and stable operation.

Figure 1: NICGIGA 10-Port Gigabit PoE+ Switch Overview

2. Package Contents

Please verify the contents of your package. If any items are missing or damaged, contact customer support.

- NICGIGA 10-Port Gigabit PoE+ Switch (Model: NIC-GS0820P-EU)
- Power Adapter
- User Manual

3. Product Features

- **10 Gigabit Ports:** Includes 8 PoE+ (Power over Ethernet Plus) ports and 2 dedicated Gigabit uplink ports.
- **High Power Budget:** Total internal power budget of 120W, with up to 30W available per PoE port.
- **PoE Standard Compliance:** Fully compliant with IEEE802.3af/at standards, automatically detecting and identifying Power Device (PD) compatibility.
- **VLAN Functionality:** Features a One-Key VLAN switch. When enabled, PoE ports (1-8) are isolated from each other

but can communicate with the uplink ports (9-10), enhancing network security and bandwidth management.

- **Robust Design:** Sturdy metal housing for durability and efficient heat dissipation.
- **Fanless Operation:** Silent operation suitable for various environments.
- **Lightning Protection:** Integrated 4KV lightning protection design safeguards the device and connected equipment.
- **Plug and Play:** Unmanaged switch requiring no software configuration for easy setup.
- **Flexible Mounting:** Supports both desktop placement and wall mounting.
- **Automatic MDI/MDIX:** Eliminates the need for crossover cables.

Figure 2: Key Product Features

4. Setup Instructions

Follow these steps to set up your NICGIGA PoE+ Switch:

1. **Unpack the Switch:** Carefully remove the switch and its accessories from the packaging.
2. **Choose a Location:** Place the switch on a stable desktop or mount it on a wall using appropriate hardware (not included). Ensure adequate ventilation around the device.

3. **Connect to Power:** Connect the provided power adapter to the switch's power input port and then plug it into a standard electrical outlet. The Power LED on the switch should illuminate.
4. **Connect Uplink Devices:** Connect your router, NVR, or other network devices to the 2 Gigabit uplink ports (ports 9 and 10) using standard Ethernet cables.
5. **Connect PoE Devices:** Connect your PoE-compatible devices (e.g., IP cameras, IP phones, wireless access points) to the PoE+ ports (ports 1-8) using Ethernet cables. The switch will automatically detect and provide power to these devices.
6. **Connect Non-PoE Devices (Optional):** You can also connect non-PoE network devices to the PoE+ ports; the switch will provide data connectivity without power.

Figure 3: Plug and Play Connectivity Example

Figure 4: Wall Mount Installation

5. Operating Instructions

5.1 LED Indicators

The front panel of the switch features LED indicators to monitor its status:

- **Power LED:** Illuminates when the switch is powered on.
- **Link/Act LEDs (for each port):** Solid green indicates a stable network link. Blinking green indicates data activity.
- **PoE LEDs (for ports 1-8):** Illuminates when Power over Ethernet is being supplied to a connected device.

5.2 VLAN Switch Operation

The switch includes a physical VLAN toggle switch. This feature allows you to isolate the PoE ports (1-8) from each other while maintaining communication with the uplink ports (9-10).

- **VLAN OFF (Default):** All ports (1-10) can communicate with each other.
- **VLAN ON:** PoE ports 1-8 are isolated from each other, preventing direct communication between devices connected

to these ports. However, all ports (1-10) can still communicate with the uplink ports (9-10). This improves network security and can prevent broadcast storms in certain scenarios.

Figure 5: One-Key VLAN Functionality

6. Maintenance

To ensure optimal performance and longevity of your NICGIGA PoE+ Switch, observe the following maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the switch. Do not use liquid or aerosol cleaners.
- **Ventilation:** Although fanless, ensure the switch is placed in a location with adequate airflow to prevent overheating. Do not block ventilation openings.
- **Environmental Conditions:** Operate the switch within the specified temperature and humidity ranges (refer to Specifications section). Avoid exposure to direct sunlight, excessive heat, or moisture.
- **Power Supply:** Use only the provided power adapter. Disconnect the power during electrical storms or when the unit is not in use for extended periods.
- **Cable Management:** Ensure all network cables are securely connected and properly routed to prevent accidental disconnections or damage.

Figure 6: Reliable Design and Power Input

7. Troubleshooting

If you encounter issues with your NICGIGA PoE+ Switch, refer to the following common problems and solutions:

- **No Power:**
  - Ensure the power adapter is securely connected to both the switch and a working electrical outlet.
  - Verify the power outlet is functional by plugging in another device.
- **No Link/Activity on a Port:**
  - Check if the Ethernet cable is properly connected at both ends.
  - Try a different Ethernet cable.
  - Verify the connected device is powered on and functioning correctly.
  - Ensure the cable length does not exceed the maximum recommended distance (typically 100 meters for Ethernet).

- **PoE Device Not Receiving Power:**
  - Confirm that the connected device is PoE-compatible (IEEE802.3af/at standard).
  - Check the PoE LED for the respective port; if it's off, power is not being supplied.
  - Ensure the total power consumption of all connected PoE devices does not exceed the switch's 120W power budget.
  - Try connecting the PoE device to a different PoE port.
- **Network Performance Issues:**
  - If VLAN mode is ON, ensure it is configured as desired for your network topology.
  - Check for excessive network traffic or faulty cables.
  - Restart the switch and connected devices.

If the problem persists after attempting these troubleshooting steps, please contact NICGIGA technical support.

8. Specifications

Feature	Description
Brand	NICGIGA
Model Number	NIC-GS0820P-EU
Ports	8 x 10/100/1000Mbps PoE+ Ports, 2 x 10/100/1000Mbps Gigabit Uplink Ports
PoE Standard	IEEE 802.3af/at
Max PoE Power Per Port	30W
Total PoE Power Budget	120W
Switching Capacity	20 Gbps
Data Transfer Rate	1000 Megabits per second (Gigabit Ethernet)
Interface Type	RJ45
Features	Fanless Design, 4KV Lightning Protection, Plug and Play, One-Key VLAN, Desktop/Wall Mount
Housing	Sturdy Metal
Compatible Devices	Computers, IP Cameras, IP Phones, Wireless Access Points, NVRs, Routers
UPC	790885573835

9. Warranty and Support

NICGIGA provides a one-year warranty for this product, covering manufacturing defects and malfunctions under normal use. Additionally, lifetime technical support is available to assist you with any questions or issues you may encounter.

For technical assistance or warranty claims, please refer to the contact information provided on the NICGIGA official website or your purchase documentation.