NICGIGA S25-0402T

NICGIGA S25-0402T 6-Port Unmanaged Ethernet Switch User Manual

Model: S25-0402T

1. Product Overview

The NICGIGA S25-0402T is an unmanaged 6-port Ethernet switch designed to expand your network with high-speed connectivity. It features four 2.5 Gigabit Ethernet ports and two 10 Gigabit RJ45 uplink ports, providing flexible and efficient network solutions for various devices such as NAS, WiFi 7 routers, PCs, and servers.

Image 1.1: Front view of the NICGIGA S25-0402T Ethernet Switch, highlighting its 4x 2.5Gb and 2x 10Gb RJ45 ports.

Key Features:

- **6 High-Speed Ports:** 4 x 2.5Gb Ethernet ports and 2 x 10Gb RJ45 ports.
- **Unmanaged:** Plug-and-play operation with no configuration required.

- **Auto MDI/MDIX:** Automatically detects and adjusts for straight-through or crossover cables.
- **Fanless Design:** Ensures silent operation, suitable for quiet environments.
- **Durable Metal Casing:** Provides robust protection and efficient heat dissipation.
- **Flexible Mounting:** Supports both desktop placement and wall mounting.

2. Package Contents

Verify that all items are present in the package:

- NICGIGA S25-0402T 6-Port Unmanaged Ethernet Switch
- Power Adapter
- Mounting Accessories (for wall mount)
- User Manual (this document)

3. Setup Instructions

The NICGIGA S25-0402T switch is designed for simple plug-and-play installation. No software configuration is required.

3.1 Physical Placement

- Place the switch on a stable, flat surface for desktop use.
- Ensure adequate ventilation around the device to prevent overheating.
- Avoid placing the switch near strong electromagnetic interference sources.
- The switch can also be wall-mounted using the provided accessories.

Image 3.1: Example of the NICGIGA S25-0402T switch mounted on a wall, demonstrating its compact size and flexible installation options.

3.2 Power Connection

1. Connect the power adapter to the DC 12V 1.5A power input port on the switch.
2. Plug the power adapter into a standard electrical outlet.
3. The Power LED indicator will illuminate, indicating the device is receiving power.

3.3 Network Connections

Connect your network devices (e.g., computers, NAS, routers, access points) to the RJ45 ports on the switch using Ethernet cables.

- **Ports 1-4:** Support 2.5Gbps, 1Gbps, and 100Mbps connections.
- **Ports 5-6 (Uplink):** Support 10Gbps, 5Gbps, 2.5Gbps, 1Gbps, and 100Mbps connections.

Ensure you use appropriate Ethernet cable types for optimal performance:

- For 2.5Gbps connections (Ports 1-4): Cat5e, Cat6, or Cat7 cables (up to 100m).
- For 10Gbps connections (Ports 5-6): Cat6 cables (up to 55m), Cat6a or Cat7 cables (up to 100m).

Image 3.2: Recommended cable types for 2.5Gbps ports (1-4).

Image 3.3: Recommended cable types for 10Gbps ports (5-6).

4. Operating Instructions

Once connected, the switch operates automatically. It uses auto-negotiation to determine the optimal speed and duplex mode for each connected device.

4.1 LED Indicators

The front panel of the switch features LED indicators to provide real-time status information:

Image 4.1: Close-up of the switch's LED indicators and their functions.

- **PWR (Power) LED:**
  - On: Device is powered on.
  - Off: Device is powered off.
- **Ports 1-4 (2.5G Link/Act) LEDs:**
  - Green On: 2.5G Link connected normally.
  - Yellow On: 10/100/1000Mbps Link connected normally.
  - Yellow Flashing: Data transmission.
  - Off: No link.
- **Ports 5-6 (10G Uplink/Link/Act) LEDs:**
  - Green On: 10G Link connected normally.
  - Yellow On: 10/100/1000M/2.5G/5G Link connected normally.
  - Yellow Flashing: Data transmission.
  - Off: No link.

4.2 Auto-Negotiation

The switch ports automatically detect the speed and duplex mode of connected devices, ensuring compatibility and optimal performance across various network speeds (10Mbps, 100Mbps, 1Gbps, 2.5Gbps, 5Gbps, 10Gbps).

Image 4.2: Diagram illustrating the auto-negotiation capability of the 10Gbps uplink ports, supporting various speeds.

5. Maintenance

The NICGIGA S25-0402T is designed for reliable, low-maintenance operation.

5.1 General Care

- Keep the device clean and free from dust. Use a soft, dry cloth for cleaning.
- Do not expose the switch to water or excessive moisture.
- Ensure the operating temperature remains within the specified range of -10°C to 50°C.
- The fanless design eliminates the need for fan cleaning and contributes to silent operation.

Image 5.1: The metal casing of the switch, designed for efficient heat dissipation and stable, fanless operation.

5.2 Firmware Updates

As an unmanaged switch, the S25-0402T typically does not require user-initiated firmware updates. Any necessary updates are handled internally by the manufacturer.

6. Troubleshooting

If you encounter issues with your NICGIGA S25-0402T switch, refer to the following common troubleshooting steps:

6.1 No Power

- Ensure the power adapter is securely connected to both the switch and a working electrical outlet.
- Verify that the power outlet is functional by plugging in another device.
- Check the Power LED on the switch. If it is off, the device is not receiving power.

6.2 No Link Light / No Network Connectivity

- Verify that the Ethernet cable is securely plugged into both the switch port and the connected device.
- Try a different Ethernet cable to rule out a faulty cable.
- Connect the device to a different port on the switch.
- Ensure the connected device (e.g., computer, router) is powered on and its network adapter is enabled.
- Check the LED indicators for the specific port. If no link light is present, there is no active connection.
- Restart the switch by unplugging and re-plugging the power adapter.

6.3 Slow Network Speed

- Ensure you are using appropriate Ethernet cable types for the desired speed (e.g., Cat6a or Cat7 for 10Gbps connections).
- Verify that the network adapter in your connected device supports the desired speed (e.g., a 2.5Gbps or 10Gbps NIC).
- Check the port LED indicators to confirm the negotiated link speed.
- Ensure there are no other network bottlenecks (e.g., slow router, internet service provider limitations).

7. Specifications

Detailed technical specifications for the NICGIGA S25-0402T Ethernet Switch:

Feature	Specification
Model Number	S25-0402T

Number of Ports	6 (4x 2.5Gb RJ45, 2x 10Gb RJ45)
Interface Type	RJ45
Data Transfer Rate (Switching Capacity)	60 Gigabits Per Second
Case Material	Metal
Operating Temperature	-10°C to 50°C (14°F to 122°F)
Item Weight	0.58 Kilograms (1.28 pounds)
Package Dimensions	7.09 x 6.22 x 2.83 inches
Color	Black
Compatible Devices	Desktop, Gaming Console, Laptop, Printer
UPC	790885828614
Manufacturer	NICGIGA

8. Warranty and Support

NICGIGA is committed to providing high-quality products and customer satisfaction.

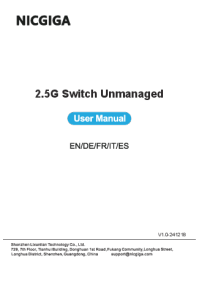
8.1 Warranty Information

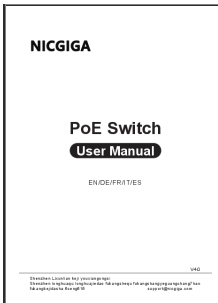
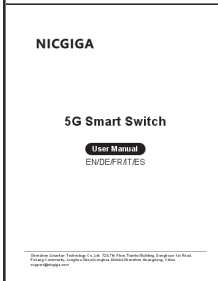
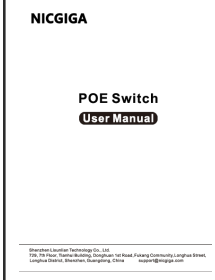
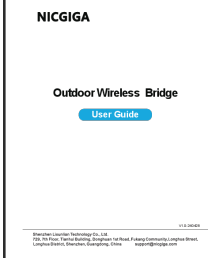
Every NICGIGA switch undergoes rigorous testing for reliability, quality, and performance. This product is covered by a **one-year warranty** from the date of purchase.

8.2 Technical Support

NICGIGA provides **lifetime technical support** for the entire product. If you encounter any issues or have questions regarding the installation, operation, or maintenance of your S25-0402T switch, please contact NICGIGA customer support through their official channels or the retailer where the product was purchased.

Related Documents - S25-0402T

	NICGIGA 2.5G Unmanaged Ethernet Switch User Manual and Specifications Comprehensive user manual and technical specifications for NICGIGA's 2.5G Unmanaged Ethernet Switches. Covers main application scenarios and detailed parameters for models S25-0402, S25-0501, S25-0801, S25-0802, S25-1602, S25-2402, S25-0802P, S25-1602P, S25-2402P, and S25-0402T.

	[NICGIGA PoE Switch User Manual V4.0 - Technical Specifications and Features] User manual for NICGIGA PoE Switches (V4.0), detailing application scenarios, front panel explanations, and comprehensive technical specifications for models including GS0410P, FS0820GP, GS0800P, AI-FS1621GP, GS1620P, FS2420GP, NIC-S25-0402P, and NIC-S25-0801P.
	[NICGIGA 5G Smart Switch User Manual - S50-0800] User manual for the NICGIGA 5G Smart Switch (Model S50-0800), providing detailed information on appearance, installation, safety precautions, site requirements, and technical specifications.
	[NICGIGA PoE Switches User Manual and Product Overview] Comprehensive guide to NICGIGA's range of Gigabit PoE switches, detailing models like GS0401P, GS0800P, GS0820P, AI-GS0821P, FS1620GP, GS1620P, FS2420GP, and AI-GS2421P, including features, application scenarios, and front panel explanations.
	[NICGIGA Outdoor Wireless Bridge User Guide - Setup and Pairing] Comprehensive user guide for the NICGIGA CPE-S900 Outdoor Wireless Bridge. Learn how to install, configure, and pair your devices for reliable outdoor network connectivity. Includes multi-language support.
	[NICGIGA M.2 WiFi Card User Manual] Comprehensive user manual for NICGIGA M.2 WiFi cards featuring Intel wireless technology. Includes detailed installation steps, driver download links for models like BE200, AX210, AX200, AX211, AX411, and support contact information.