

NICGIGA S25-1602

NICGIGA 18-Port 2.5G + 2-Port 10G SFP+ Ethernet Switch User Manual

Model: S25-1602

1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of the NICGIGA 18-Port 2.5G + 2-Port 10G SFP+ Ethernet Switch (Model S25-1602). This unmanaged switch is designed to expand your network capacity and enhance data transfer speeds for various devices.

Key Features:

- **18-Port Configuration:** Features 16 x 100/1000/2500Mbps RJ45 Ethernet ports and 2 x 10G SFP+ uplink ports.
- **High Switching Capacity:** Offers 120Gbps switching capacity for stable and large network environments.
- **Auto-Negotiation:** Automatically detects and adjusts link speed (100Mb/1G/2.5G) to provide optimal performance and compatibility.
- **Robust Design:** Includes 4KV lightning protection and a fanless metal housing for durability, efficient heat dissipation, and quiet operation.
- **Plug and Play:** Requires no software or configuration for easy setup and immediate use.
- **Flexible Mounting:** Supports both desktop and 19-inch rack mount installations.

2. PRODUCT OVERVIEW

The NICGIGA S25-1602 switch provides multiple high-speed ports for connecting various network devices. Below is an illustration of the switch's components and indicators.

16-Port 2.5G Ethernet Switch with 2 Port 2.5

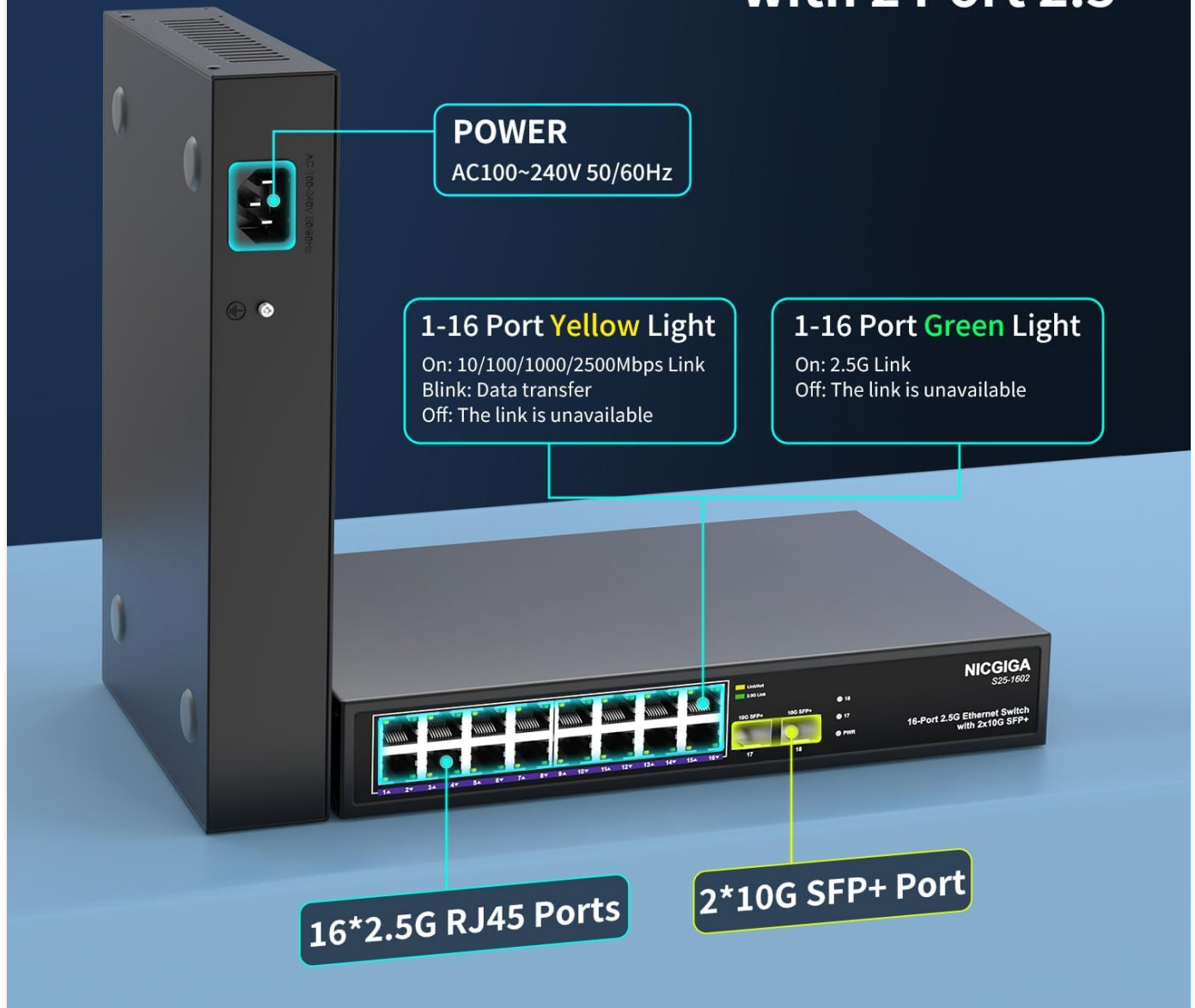


Figure 1: Front and Rear Panel Layout of the NICGIGA S25-1602 Switch. This image shows the 16 RJ45 2.5G ports, 2 SFP+ 10G uplink ports, power input, and LED indicators for link status and data transfer.

LED Indicators:

- **1-16 Port Yellow Light:**
 - On: 10/100/1000/2500Mbps Link
 - Blink: Data transfer
 - Off: The link is unavailable
- **1-16 Port Green Light:**
 - On: 2.5G Link
 - Off: The link is unavailable
- **Power LED:** Indicates power status.

3. SETUP INSTRUCTIONS

Follow these steps to set up your NICGIGA Ethernet Switch:

1. **Unpack the Switch:** Carefully remove the switch and all accessories from the packaging. Verify that all components listed in the packing list are present.
2. **Choose a Location:** Place the switch on a stable, flat surface (desktop) or install it in a 19-inch rack. 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 AC power outlet (AC100-240V, 50/60Hz). The Power LED should illuminate.
4. **Connect Network Devices:**
 - Connect your network devices (e.g., computers, servers, NAS, WiFi 6 APs) to the 16 RJ45 2.5G ports using standard Ethernet cables.
 - For higher bandwidth connections, use the 2 SFP+ 10G uplink ports with compatible SFP+ modules and fiber optic cables (modules not included).
5. **Verify Connection:** Once devices are connected, observe the LED indicators on the switch. A solid yellow or green light indicates a successful link, and blinking indicates data transfer.



Figure 2: Basic setup steps for the NICGIGA Ethernet Switch, illustrating power and device connections.



Figure 3: Installation flexibility with 19-inch rack mount option and key design features.

4. OPERATING INSTRUCTIONS

The NICGIGA S25-1602 is an unmanaged switch, meaning it operates with minimal user intervention. Once powered on and connected, it functions automatically.

Plug and Play Operation:

No software installation or complex configuration is required. Simply connect your Ethernet devices to the switch, and it will automatically detect and establish network connections. It supports automatic MDI/MDIX, eliminating the need for crossover cables.

Auto-Negotiation:

The switch's auto-negotiation feature intelligently senses the link speed of connected devices (100Mbps, 1Gbps, or 2.5Gbps for RJ45 ports) and adjusts accordingly to provide optimal performance. The SFP+ ports support 10Gbps uplink speeds.

10G Uplink Port for Better Broadband Needs



Figure 4: The 10G SFP+ uplink ports provide significantly higher bandwidth for demanding network needs.

Applications:

This switch is suitable for various high-bandwidth applications, including:

- 2.5G WiFi 6 Access Points (APs)
- 2.5G Network Attached Storage (NAS)
- 2.5G PCIe adapters and servers
- Gaming PCs requiring high network throughput
- 4K video streaming and editing workstations

Meet the Higher Performance Requirements of 2.5G Devices

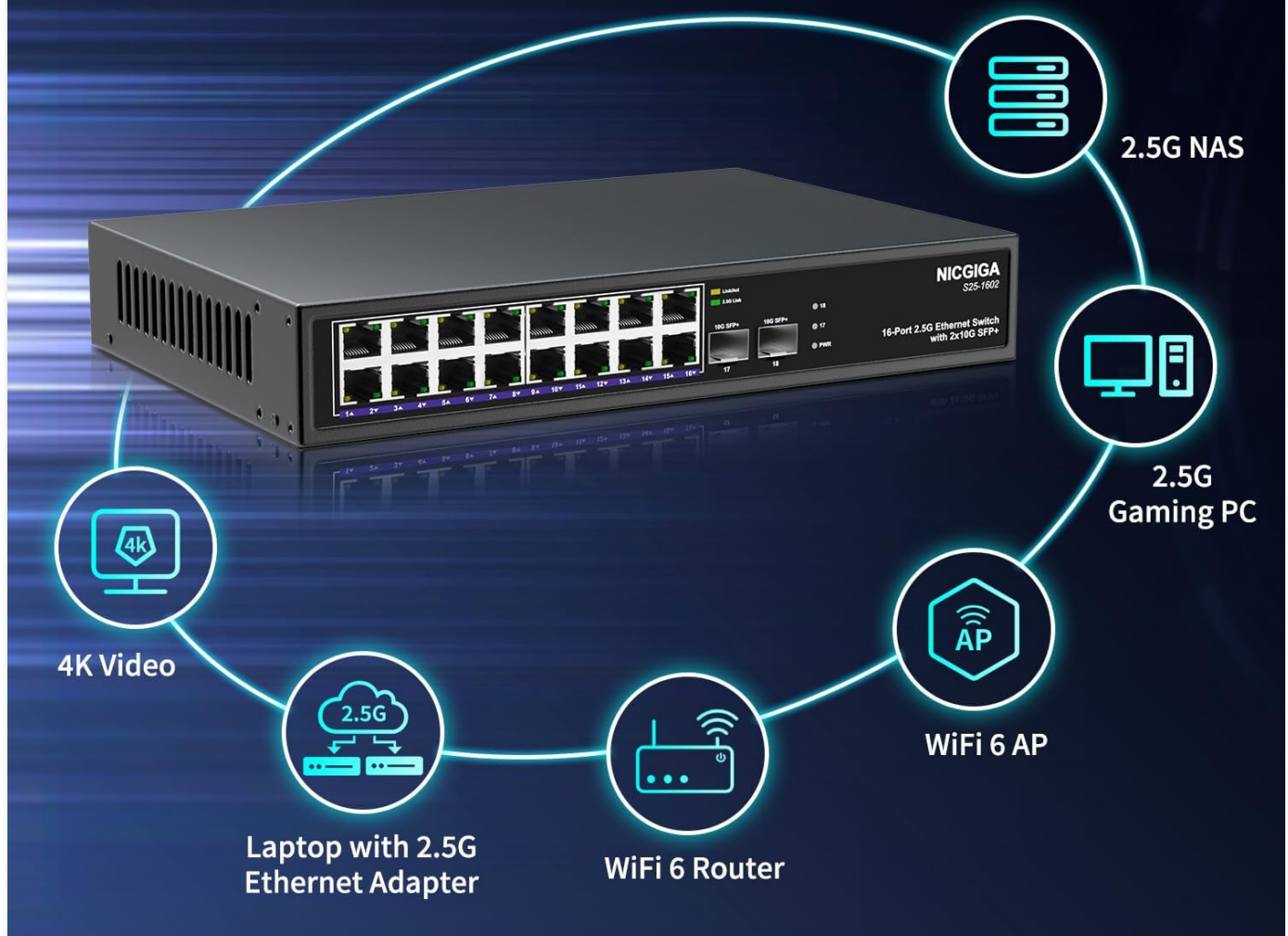


Figure 5: The switch supports a wide range of 2.5G devices for enhanced network performance.

5. MAINTENANCE

The NICGIGA S25-1602 switch is designed for low maintenance. Its fanless metal design ensures efficient heat dissipation without moving parts, contributing to its longevity and quiet operation.

- **Environmental Conditions:** Operate the switch within its specified temperature and humidity ranges. Avoid placing it in direct sunlight or near heat sources.
- **Ventilation:** Ensure that the ventilation holes on the device are not obstructed to allow for proper airflow.
- **Cleaning:** Use a soft, dry cloth to clean the exterior of the switch. Do not use liquid or aerosol cleaners.
- **Lightning Protection:** The integrated 4KV lightning protection helps safeguard the device from electrical surges during adverse weather conditions. However, it is always recommended to disconnect the power during severe thunderstorms.

6. TROUBLESHOOTING

If you encounter issues with your NICGIGA Ethernet Switch, refer to the following common troubleshooting steps:

- **No Power:**
 - Ensure the power adapter is securely connected to both the switch and a working power outlet.
 - Verify the power outlet is functional by plugging in another device.
- **No Link Light:**
 - Check that the Ethernet cable is securely plugged into both the switch port and the network device.
 - Ensure the connected network device is powered on and functioning correctly.
 - Try a different Ethernet cable or port to rule out cable or port issues.
 - For SFP+ ports, ensure the SFP+ module is correctly inserted and compatible.
- **Slow Network Speed:**
 - Verify that both the switch port and the connected device support 2.5G speeds. The LED indicators can help confirm the link speed.
 - Ensure you are using Cat5e or higher-rated Ethernet cables for 2.5G connections.
 - Check for network congestion or issues with other devices on your network.
- **Intermittent Connection:**
 - Inspect Ethernet cables for damage.
 - Ensure the switch is placed in a stable environment, free from excessive heat or electromagnetic interference.

As an unmanaged switch, the NICGIGA S25-1602 requires no software configuration. Most issues can be resolved by checking physical connections and power.

7. SPECIFICATIONS

Feature	Description
Brand	NICGIGA
Model Number	S25-1602
Number of Ports	18 (16x 2.5G RJ45, 2x 10G SFP+)
Switch Type	Unmanaged
Data Transfer Rate	2500 Megabits Per Second (RJ45), 10 Gigabits Per Second (SFP+)
Switching Capacity	120Gbps
Interface	RJ45, SFP+
Compatible Devices	Desktop, Laptop, NAS, WiFi 6 AP, Servers
Color	Black
Case Material Type	Metal
Item Weight	1.84 Kilograms

Feature	Description
Special Features	Fanless Design, 4KV Lightning Protection, Desktop or 19-inch Rack Mount

8. WARRANTY AND SUPPORT

NICGIGA provides a comprehensive warranty and technical support for this product.

- **Warranty:** The NICGIGA S25-1602 switch comes with a one-year manufacturer's warranty. This warranty covers defects in materials and workmanship under normal use.
- **Technical Support:** Lifetime technical support is provided for the product. For assistance with setup, troubleshooting, or any other inquiries, please contact NICGIGA customer service. Refer to the product packaging or the official NICGIGA website for contact details.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question