NS-1G48

48-Port Gigabit PoE Switch w/ 6×10G SFP+ (1U Rackmount)

USER MANUAL

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Table of Contents

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating, or adjusting this product. Keep this manual for future reference.

Important Safety Note – Surge Protection Recommended

This product contains sensitive electronic components that may be damaged by electrical spikes, surges, lightning strikes, or static discharge. To protect and extend the service life of your equipment, we strongly recommend using a surge protection device.

Warranty Registration

Activate your warranty by registering your product at:
→ **www.orei.com/register**

Need Technical Support? We're Here to Help.

Our experienced Technical Support Team is available to answer your questions, offer expert advice, and help troubleshoot any issues to keep your project on track—on time and on budget.

Live Support Hours (US/Canada/Mexico):

⏰ Monday–Friday | 9:00 a.m. – 5:00 p.m. Central Time

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Send us an instant message—our team typically responds within moments during live support hours.

Introduction

The NS-1G48 Network Switch is a high-performance solution featuring 48 adaptive 10/100/1000M PoE ports and 4 high-speed 10G SFP+ uplink ports. Built for demanding network environments, it supports full line-speed forwarding to ensure smooth and stable data transmission across all connected devices.

Housed in a rugged 1U 19-inch metal chassis, the NS-1G48 is suitable for both desktop and rack-mount installations, offering flexible deployment in a variety of environments. It functions effectively as a core switch for medium-sized LANs, an aggregation switch for large-scale networks, or an access switch in enterprise-level infrastructure, delivering dependable and scalable connectivity.

A built-in web-based management interface allows intuitive control and configuration of network settings. PoE support simplifies the installation of IP cameras, wireless access points, and AV equipment, including the ToVi range of products by OREI. The NS-1G48 is fully compatible with and purpose-built for seamless integration with ToVi's X1, X2, and X4 series.

Features

1. **48x 1Gbps Adaptive PoE Ports + 4x 10G SFP+ Ports** – Provides extensive connectivity and high-speed uplink options for scalable network expansion.
2. **Full Line-Speed Forwarding** – Guarantees stable, uninterrupted data transfer across all ports, even under heavy loads.
3. **Standard 19-Inch 1U Rackmount Design** – Supports both rack-mounted and desktop installations for flexible deployment.
4. **Durable Metal Housing** – Engineered for reliable performance in demanding environments, including surveillance, networking, and enterprise AV systems.
5. **Plug-and-Play Setup** – Allows quick deployment without requiring software installation for basic configurations.
6. **PoE Support** – Simplifies deployment of powered devices such as IP cameras and AV Over IP equipment.
7. **Web-Based Management Interface** – Offers centralized, user-friendly control for monitoring and configuring the network.
8. **Made for ToVi** – Fully compatible with ToVi's X1, X2, and X4 series products, ensuring seamless integration.

Specifications & Package Contents

Package Contents

1.	NS-1G48	1pcs
2.	AC Power Cord	1pcs
3.	Mounting Ear	2pcs
4.	Screw	6pcs
5.	Rubber Feet	4pcs
6.	Serial Port Cable	1pcs
7.	User Manual	1pcs

Specifications

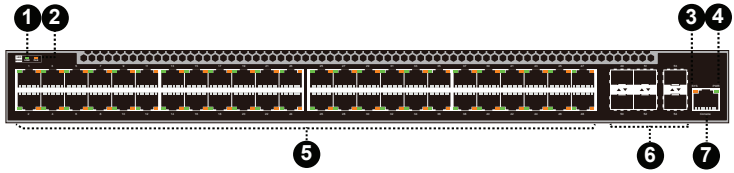
Technical			
Exchange Bandwidth	216Gbps	Jumbo Frame	12K
Packet Forwarding Rate	160.7Mpps	ACL Table Size	4K
Forwarding Mode	Store-and-forward	Number of VLANs	4K
Packet Forwarding Cache	16Mbit	Number of Three-layer Interfaces	1K
DDR Memory	2Gbit	Routing Host	8K IPv4 or 2K IPv6
Flash Storage	256Mbit	Routing Table Size	12K IPv4 or 3K IPv6
MAC Address Table Capacity	32K	Port Queue	8
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)		

Specifications

Connection	
Network Port	48x Gigabit network port [RJ45] 6x 10 Gigabit SFP+ port [SFP+]
Management Port	1x Console port [RJ45]
LED Indicator Light	Power, LINK, PoE, SYS
Mechanical	
Housing	Metal Enclosure
Color	Gray
Dimensions	L: 440mm / 17.3in | W: 350mm / 13.78in | H: 44mm / 1.73in
Weight	5.37kg / 11.84lbs
Power Supply	100~240VAC, 50/60Hz
Power Consumption	60W (Max)
Operating Temperature	0˚C ~ 40˚C / 32˚F ~ 104˚F
Storage Temperature	-10˚C ~ 70˚C / 14˚F ~ 158˚F
Operating Humidity	5%~95% relative humidity, non-condensing
Mounting Method	Desktop installation/rack mounting
PoE	
PoE Port	1-48
PoE Standard	IEEE802.3af, IEEE802.3at
PoE Power Budget	850W
Maximum PoE Power Per Port	30W
PoE Voltage	52V
PoE Pin Definition	V - (RJ45 Pin 1,2), V + (RJ45 Pin 3,6)

Operation Controls and Functions

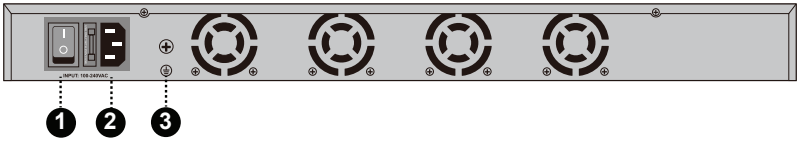
Front Panel



No.	Name	Function Description
1.	LINK LED	▪ Light on: The corresponding port is linked with the network. ▪ Flash: The Switch is transmitting/receiving data through the corresponding port.
2.	PoE LED	▪ Light on: The corresponding port is connected with a PD device. ▪ Light off: The corresponding port doesn't supply power, or there is no detected PD device.
3.	SYS LED	The SYS LED flashing indicates that the system is working normally.
4.	PWR LED	The power LED is on when the unit is powered on.
5.	PoE ports	48x 10/100/1000M adaptive PoE ports, supporting PoE function.
6.	SFP+ ports	6x 10G SFP+ ports.
7.	Console port	1x serial port, connected to PC or control system for serial port commands transmission.

Operation Controls and Functions

Rear Panel

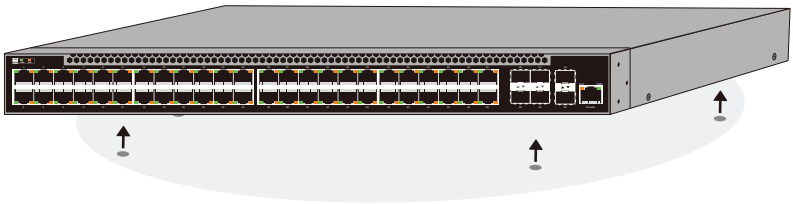


No.	Name	Function Description
1.	Power switch	After connecting the power cord, press the power switch to turn on/off the unit.
2.	Power port	Plug the included power cord into the power port, supporting input voltages of 100-240VAC, 50/60Hz.
3.	GND	Connect the unit gousing to the ground via specialized grounding wire.

Installation Instruction

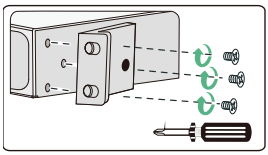
Desktop Installation

When installing the Switch on the desktop, the included rubber feet must be placed at the four corners of the device's bottom. Please leave sufficient space between the device and other surrounding objects to ensure proper ventilation.



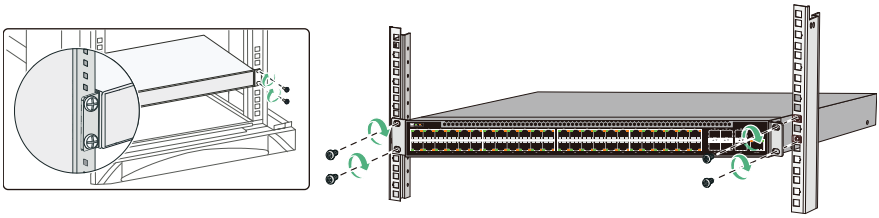
Rack Mounting

The Switch can be installed in an EIA standard 19-inch rack, which can be placed together with other devices in the wiring closet. During installation, attach the mounting brackets to the side panels of the Switch (one on each side) and fasten them with the included screws (please note that this installation rack is not for small Switches).



Installation Instruction

Then, install the Switch onto the rack using the screws provided with the rack.



Notes:

(1) Check if the power cord is securely wrapped around the AC power connector.

(2) Ensure proper heat dissipation and ventilation around the Switch.

(3) Do not stack heavy objects on top of the Switch.

(4) After installation, do not turn on the power before connecting the power cord to the socket,

otherwise it will damage the Switch. During a power outage, please disconnect the power supply of the Switch. Reconnect it after the power supply is restored.

Web Management Operation Guide

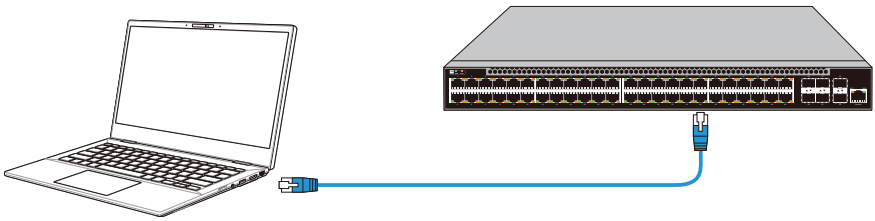
Users can use a web browser to configure the Switch, monitor the network status and display statistical information.

The embedded Web-based management currently supports the following web browsers:

1. Internet Explorer 6 or higher versions
2. Netscape 8 or higher versions
3. Mozilla
4. Firefox 1.5/2.0 or higher versions

Follow the steps below to log in to the Web management interface.

Step 1: Connect the Ethernet port of the PC to any port on the front panel of the Switch with a standard Ethernet cable.

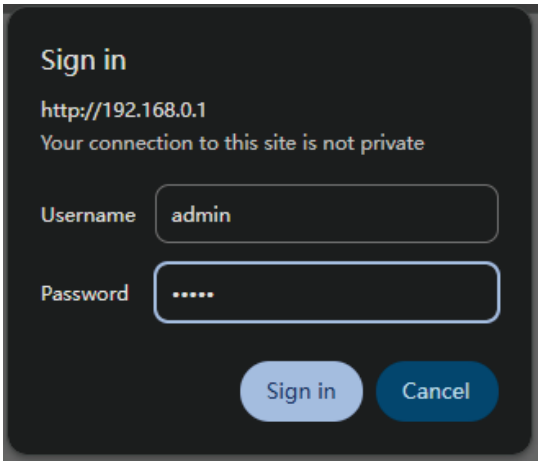


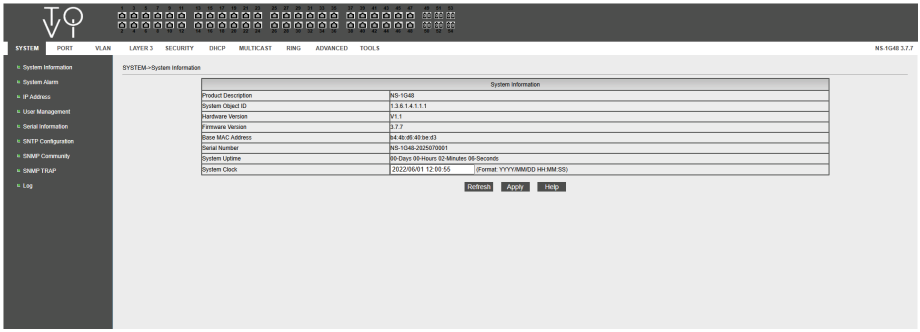
Step 2: Set the IP address of the PC to be in the same network segment with the Switch. For example, the IP address of the Switch is 192.168.0.1. The IP address of the PC must also be 192.168.0.z (z is any number between 1 and 254), and the subnet mask must be 255.255.0.0.

Note: The Switch's default IP address is 192.168.0.1, the subnet mask is 255.255.255.0, and the default gateway is 0.0.0.0.

Step 3: Input the Switch's default IP address (192.168.0.1) into the Web browser address bar on the PC, then tap the ENTER button to enter the Web management login interface.

Step 4: Input the username and password (both are admin by default), then click the "Sign in" button to access to the Web management interface.





FAQs
& Troubleshooting

1. How many devices can I connect to the NS-1G48
You can connect 24 devices via the adaptive 10/100/1000M PoE ports (ideal for IP cameras, wireless APs, and AV gear like ToVi products).

2. Can I use this switch with non-PoE devices?
Absolutely. The PoE ports are adaptive and can also work with standard (non-PoE) Ethernet devices without any issues.

3. Is it rack-mountable?
Yes. The NS-1G48 comes with a 1U 19-inch metal chassis and Includes mounting ears for installation.

4. The switch does not power on.
- Check if the power cable is connected properly. - Try a different power outlet. - Check if the power LED on the unit is lighting up.

5. Connected devices are not receiving power (PoE not working).
- Ensure the device is PoE compatible. - Confirm that the total PoE power budget does not exceed the capability of the switch. - Try connecting the device to another PoE port. - Check the web interface for PoE status or port shutdowns.

Still have some questions?

Please feel free to contact us at: info@orei.com. OR Fill out the form on the 'Contact Us' page on the website.

Our team will be more than happy to help you.

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