NEXXT® SOLUTIONS

INFRASTRUCTURE

Professional Series

NEXXT SOLUTIONS

Axis2400R
24-PORT GIGABIT RACK MOUNTABLE SWITCH

ALARM
SYS
PWR

10/100/1000M

10/100/1000M

Axis2400R

24-PORT GIGABIT RACK MOUNTABLE SWITCH

Model: **NSW-A2848PUR**

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Note: The diagrams included in this manual are not exact visual reproductions of the actual product. They are abstract, schematic representations designed to illustrate the most general or relevant aspects of the product, its installation and use. The product may therefore present slight variations in its appearance, without affecting its functionality or performance.

Safety measures.

Warning:

- In a residential environment, running this device may cause radio interference.
- The product has an optical fiber port with metal shielding or tensile components and the length of the connecting cable is expected to be less than 3m.
- Please do not place the switch near water or damp places and prevent water or moisture from entering the switch housing.
- Ensure that the working environment of the switch is clean. Excessive dust may cause electrostatic adsorption, which not only affects the service life of the device, but also easily causes communication faults.
- To avoid the danger of electric shock, please do not open the case when the switch is working. Do not open the case of the commutator on your own, even if it is not charged.
- Insert the power module into the chassis in the correct direction according to the installation instructions. Otherwise, the device cannot be powered on.
- Pluggable power modules of different specifications cannot be mixed into the same device.
- Before cleaning the switch, remove the power plug from the switch. Do not use liquid to clean the switch and do not wipe it with a wet piece of cloth.

1. Introduction:

High-performance networking for seamless data transfer

The **Axis2400R** is an unmanaged, rack-mountable Gigabit Ethernet switch, purpose-built for small and medium-sized businesses that demand reliable, high-speed network connectivity. With 24 UTP/STP RJ-45 ports supporting 10/100/1000 Mbps and advanced features like auto MDI/MDIX and polarity switching, this switch minimizes network congestion and ensures efficient data flow. Its store-and-forward functionality guarantees that data packets are accurately delivered to each port. Designed with a compact, 19-inch rack-mountable chassis, it is the ideal solution for upgrading networks with improved performance, stability, and scalability. Whether you're powering multiple devices or optimizing your network's efficiency, the Axis2400R delivers exceptional results to meet the demands of modern networks.

1.1 Features

- 24-Ports auto-sensing 10/100/1000 Mbps ports switch
- Compatible standards:To achieve greater adaptability to different Ethernet environments, this switch complies with the following standards: IEEE802.3, IEEE802.3u, IEEE 802.3ab, IEEE 802.3x
- Hassle-free plug and play installation: No configuration required to integrate it into your network
- Transmission distance up to 328 ft (100 m), speed up to 1,000 Mbps.
- Add up to twenty-four devices to a local network with 24 10/100/1000Mbps Auto-Negotiation RJ45 ports.
- Supports MAC address auto-learning and auto-aging.
- LED indicators for monitoring power, link, activity.
- Metal case with sleek and compact design ideal for desktop or rack installation. Its durable construction provides better heat dissipation. Its passive cooling system ensures quiet operation with less noise.
- 4 100/1000M Ethernet SFP modules to boost your network flexibility, enabling high-speed fiber connections for extended coverage and enhanced reliability. Perfect for long-distance data transmission, seamless scalability, and optimal performance in demanding network environments.

1.2 Package contents

Upon opening the box, ensure that the following items are included:
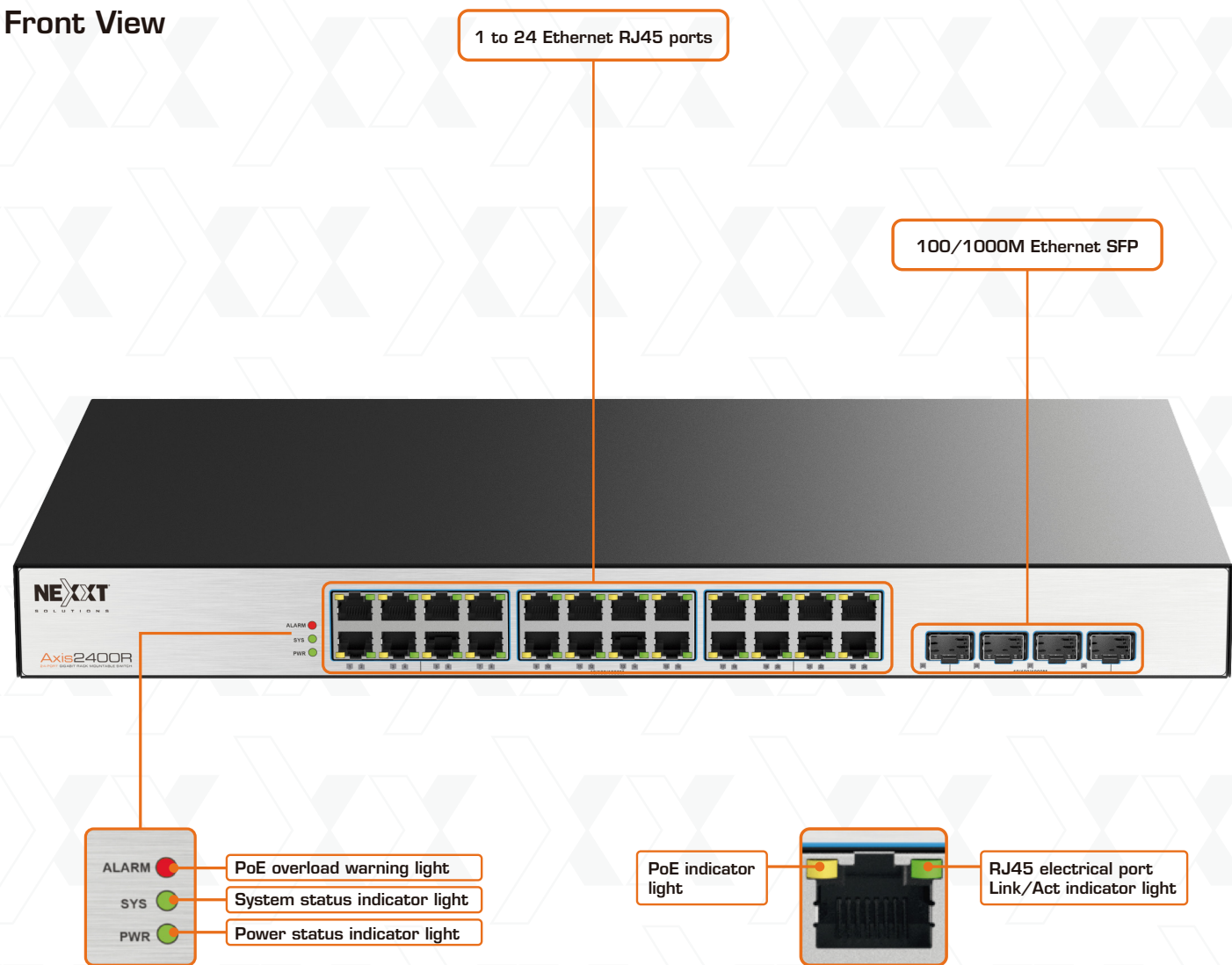
- 24+4-port switch
- AC power cable
- Grounding cable with ring terminal
- Rack kit: mounting ears (x2), M3 screws (x4)
- Rubber pads (for on-shelf/desk installation) (x4)

If any of the above-listed items is missing or damaged, please contact the reseller who you purchased the switch from for a replacement.

1.3 Front and rear panel overview

The front panel features twenty-four 10/100/1000 Mbps UTP ports with Link/Act and PoE indicators on each one, plus four 100/1000M Ethernet SFP, and Alarm, System and Power status indicators.

Back View

Power module

Front View

1 to 24 Ethernet RJ45 ports

100/1000M Ethernet SFP

100-240V~,50/60Hz,0.5A

Grounding cable with ring terminal

Grounding lug

ALARM — PoE overload warning light
SYS — System status indicator light
PWR — Power status indicator light

PoE indicator light

RJ45 electrical port Link/Act indicator light

Note: Please use the supplied power cord only. The use of any other cable may damage the unit and void the warranty.

2.1 LED indicators

The LED indicators provide information about the power and link status of each corresponding port. These indicators also facilitate the monitoring and troubleshooting of the device.

LED	Description
Power status indicator light	• Green light is always on: The switch is powered on
	• Indicator light is off: The switch is not powered on
System status indicator light	• Blinking green: The switch system is up
	• Steady green: The switch is being started
PoE overload warning light	• Steady red: The PoE belt is overloaded
	• Red light off: PoE power is normal
PoE indicator light	• Orange light is always on: PoE loaded
	• Orange light is always off: PoE not loaded
RJ45 electrical port Link/Act indicator light	• Green light is always on: Port 10M/100M/1000M Link up
	• Green light is flashing: Port 10M/100M/1000M data transmission and reception
	• Indicator light is off: Port not connected
SFP optical port Link/Act indicator light	• Green light is always on: Port 10M/100/1000M Link up
	• Green light is flashing: Port 10M/100M/1000M data transmission and reception
	• Indicator light is off: Port not connected

3 Installation

3.1 Preliminary steps

Before installing the Axis2400R and connecting it to the network, make sure to follow the recommendations listed below:
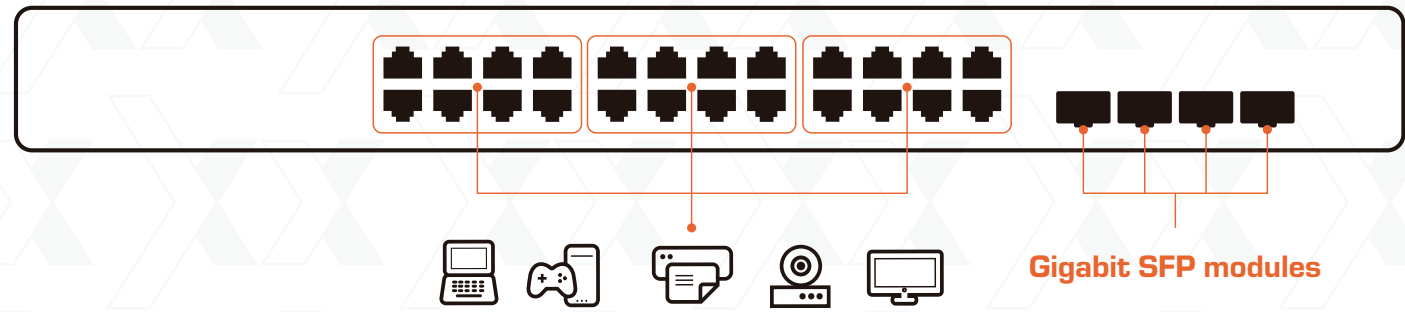
- Never place heavy objects on top of the switch.
- Place the switch on a secure, stable and clean surface. The switch can be mounted on the wall or placed free-standing on a desktop.
- Check the power supply to confirm a safe connection.
- Make sure there's adequate space for proper heat dissipation and ventilation around the switch. Allow at least 10 cm clearance between the rear panel and the wall to dissipate hot air. If you need to stack other devices on top of the switch, a minimum separation of 1.5 cm should be used
- Electrical power supplied should match the voltage specified.
- Never install a power cord while it is electrified.
- Do not power the switch before cabling is completed.
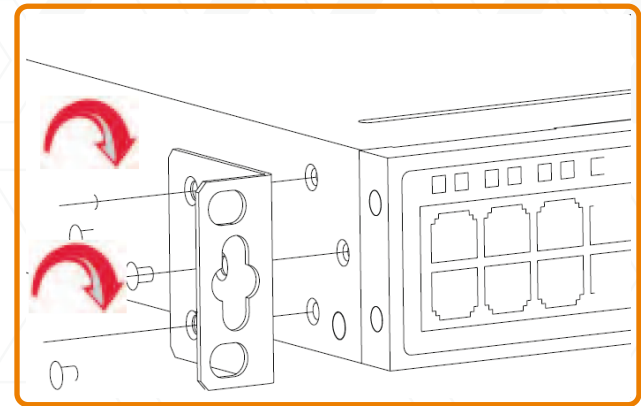
3.2 Installation procedures

The switch can be mounted in a rack or placed free-standing on a desktop or workbench.
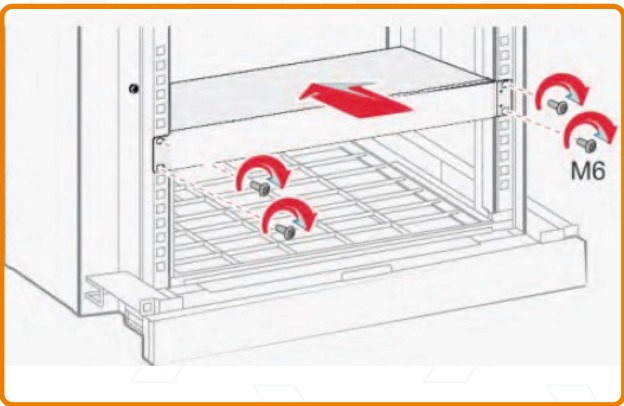
3.2.1 Installation on a flat surface

Attach the four self-adhesive rubber pads (supplied) to each corner on the bottom of the chassis and then place it securely on the workbench.

Gigabit SFP modules
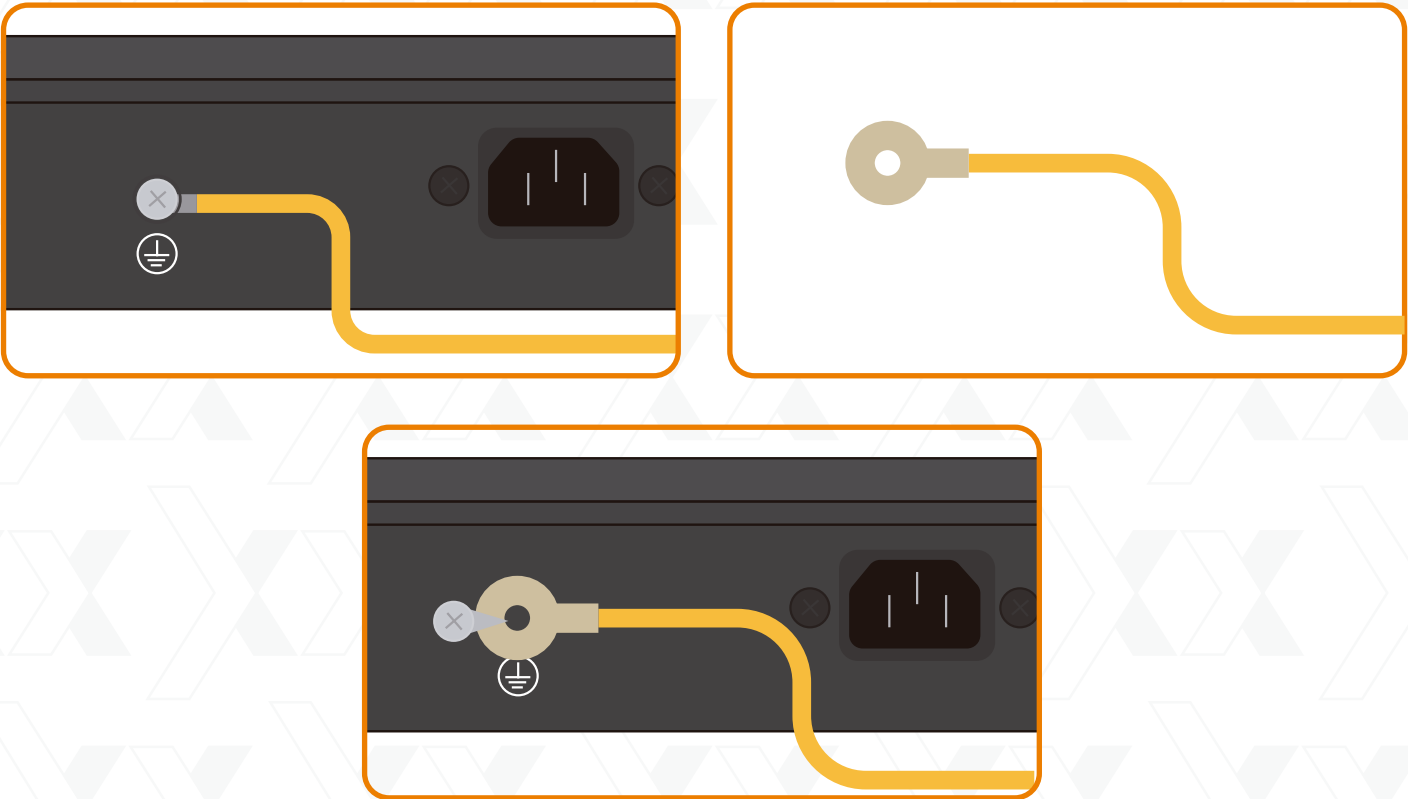
3.2.2 Installation in a standard 19-inch rack

a) Attach the mounting ears to the lateral panels of the switch

b) To install the switch on the rack or cabinet, screw the mounting ears to the front vertical mounting flanges using M6 screws.

2.3 Connecting the grounding cable

Remove the screw from the grounding lug. Then, insert it through the ring terminal of the grounding cable. Finally, fasten both to the grounding lug again to attach the grounding cable.

Warning!

- Never install a power cord while it is electrified.
- Do not power the switch before installation and cabling are completed.
- Make sure that the switch is grounded reliably.

Plug the supplied AC power cord into the built-in power module on the rear panel of the switch. Then, plug the switch into a nearby power outlet.
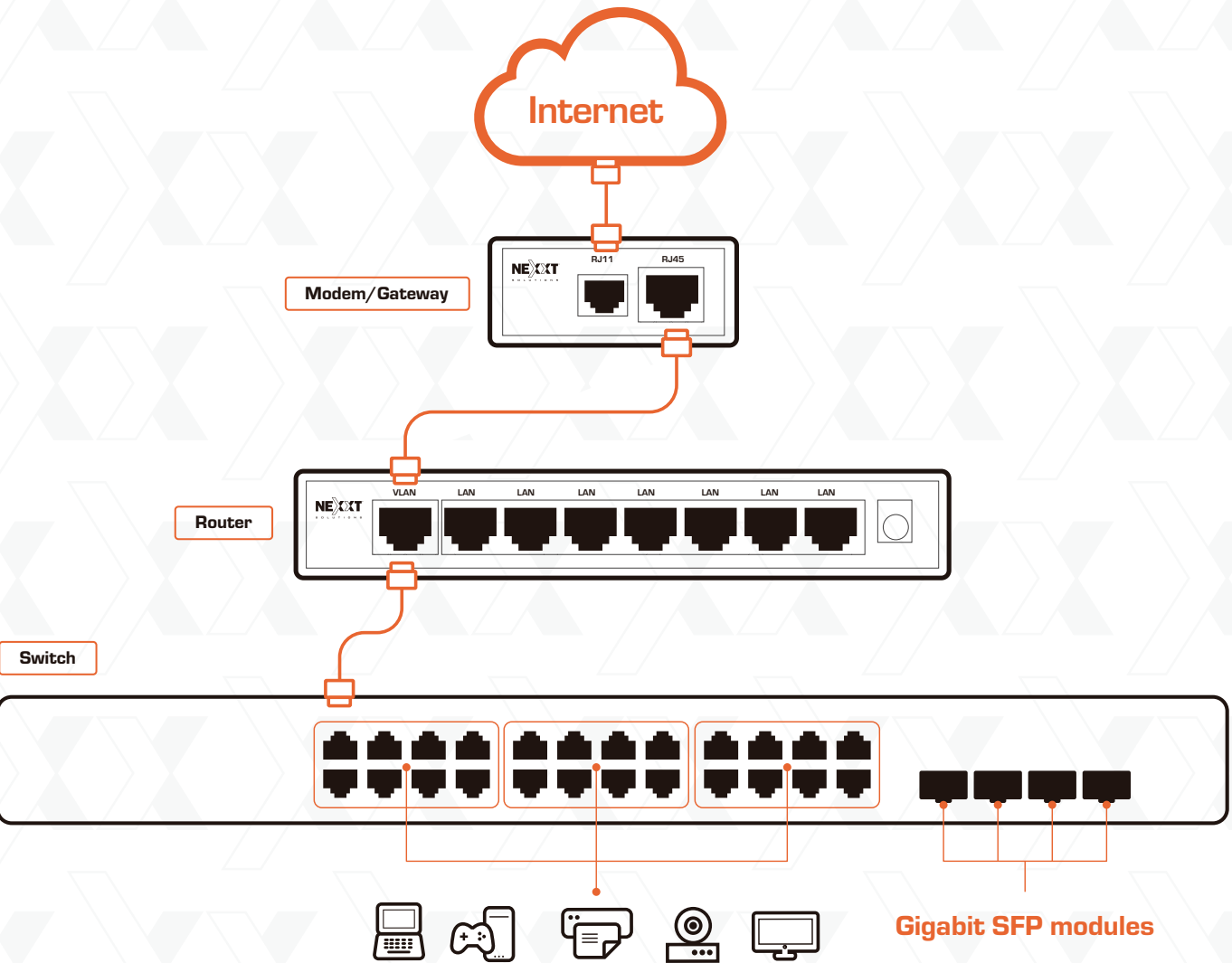
5. Connect the switch to the network

Use ethernet cables to connect the switch to network devices, such as a PC with a NIC port (Network Interface Card, also known as Ethernet card or network adapter)

Use standard Ethernet cables to connect the switch to the network devices as illustrated below. Switch ports will automatically adjust to the characteristics (AUTO Negotiation/AUTO MDI/MDIX) of the device that is connected. To verify whether a device is connected or not, refer to the LED indicator table above for details.

Commonly used method to set up an Ethernet connection.

With the 24 UTP/STP ports available in this switch, you can easily expand your network by connecting multiple devices enabled with RJ45 ports simultaneously, such as PCs, laptops, routers, servers, TV sets, printers, gaming consoles and others.

Internet

Modem/Gateway

RJ11 RJ45

Router

VLAN LAN LAN LAN LAN LAN LAN LAN

Switch

Gigabit SFP modules

Specifications

MPN	NSW-A2848PUR
Hardware features	
Chipset	EN8853D+RTL8238B+RTL8239
Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x
Port interface	24 10/100/1000M Ethernet RJ45
	4 100/1000M Ethernet SFP
Network media	10BASE-T: UTP category 3,4,5 cable [maximum 100 m]
	EIA/TIA-568 100Ω STP [maximum 100 m]
	100BASE-TX: UTP category 5,5e cable [maximum 100 m]
	EIA/TIA-568 100Ω STP [maximum 100 m]
	1000BASE-T: UTP category 5,5e,6 or above cable [maximum 100m]
	EIA/TIA-568 100Ω STP [maximum 100 m]
Downlink	24 10/100/1000M Ethernet RJ45
Uplink	4 100/1000M Ethernet SFP
Flash	8MB
SDRAM	256K
Data rate	56Gbps
Forwarding rate	41.66Mpps
PoE standard	IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt
PoE ports	1~24
PoE power budget	480W
Auto MDI/MDIX	Supported
SFP ports	25~28
AC input range	100-240V, 50/60Hz
Power consumption	POE Power: 480W | Total power: 560W
Rack mountable	Supported
Product dimensions	17.32 x 10.23 x 1.73 in
Product weight	124.85 oz
Lightning proof power supply protection	4KV
Built-in fan	2
Performance specifications	
Backplane bandwidth	56Gbps
Packet filtering / Forwarding rate	14880pps (10Mbps) per port
	148800pps (100Mbps) per port
MAC address table	8K
MAC address learning	Auto-learning, auto-aging
Pack buffer	4M
Switching method	Store-and-forward
Other specifications	
Operating temperature	32°F~113°F
Storage humidity	-40°F~158°F
Operating humidity	5%-95% No Condensation
Storage humidity	5%-95% No Condensation
Installation	Rack mounted
Certification	CE, FCC, RoHS
Box dimensions	20.66 x 13.77 x 3.58 in
Box weight	128.73 oz
Warranty and support	5-year warranty
Package contents	24+4-port switch, AC power cable, Grounding cable, Rack kit [ears (x2), screws (x4)], Rubber pads, QIG

FCC statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

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