User Manual for RB10-2404M-PSE

10 Gigabit Uplink Management Switch

ROBOfiber

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01 Introduction

Product overview

RB10-2404M-PSE is a 10G uplink Layer 3 enterprise level network managed PoE switch optimized for enterprise level customers. Switch implements a new generation high-performance platform and new self-developed switch OS. Supports flexible 802.1Q VLAN, IGMP, port monitoring, port aggregation, bandwidth control, ring network applications and other network management functions. Model is suitable for MDU/MHU applications, campuses, dormitories and SMB/enterprise customers.

Port performance

- 24x 10/ 100/1000M PoE ports, full wire speed forwarding.
- 4x 10 Gigabit SFP+ optical fiber uplink ports for high-speed uplink transmission.
- Each port supports Auto MDI / MDI-X and duplex / speed auto negotiation.
- Supports IEEE 802.3x full duplex flow control and back-pressure half duplex flow control.

Features

- IPv6 support
- IEEE 802.1Q VLAN support
- Voice VLAN, QoS voice data
- QoS port based, 802.1p and DSCP based
- ACL support, packet filtering matching rules, time permissions, and flexible security access control policies
- IGMP V1 / V2 multicast protocol, IGMP snooping support, matching multi terminal HD video monitoring and video conference access requirements
- Multicast VLAN support, multicast filtering, network bandwidth optimization
- Supports port monitoring, mirror data of monitored port
- Supports web GUI management
- Supports port trunking to increase bandwidth, and link backup to improve reliability.
- Supports static routing

Security & Protection

- STP / RSTP / MSTP spanning tree protocol is supported to eliminate layer-2 loops and provide link backup.
- Supports tree security function, prevent unauthorized devices in tree network
- Supports static aggregation and dynamic aggregation, increasing link bandwidth, load balancing, link backup

Management and Maintenance

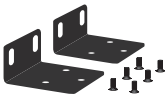
- Support web management, CLI command line (console, telnet), SNMP (v1/v2/v3) and other diversified management and maintenance methods.
- Supports HTTPS, SSL V3, TLS v1, SSH v1/v2 and other encryption methods
- Supports RMON, system log and port traffic statistics to facilitate network optimization and reconfiguration.
- Users can monitor working status of switch through the power indicator (PWR), port status indicator and system status indicator (SYS).

02 Contents

Switch

AC power cable

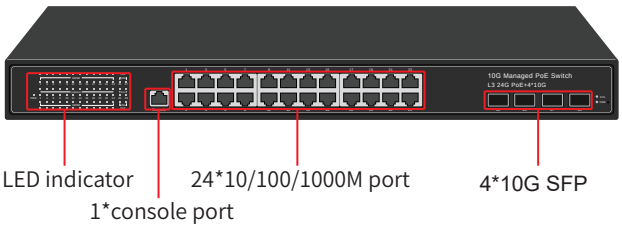
User Manual



Optional rack mounting kit

03 Switch diagram

Front



Back

LED **definition:**

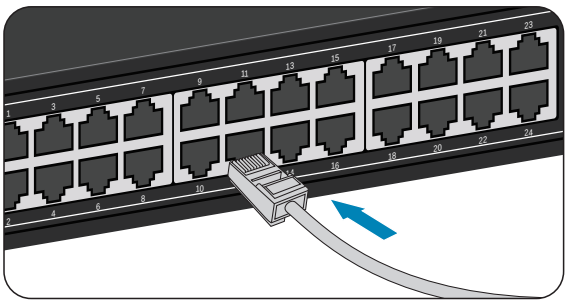
Indicator	State	Description
Power indicator：PWR	Green light ON	Normal power on
	OFF	Not powered on
Optical port connection indicator：25~28【10G】	ON	The optical port operates either 1G or 10G speed
RJ45 port connection indicator：1~24【Giga】	ON	The corresponding optical port operates at a rate of 1000M
PoE port indicator：1~24【Giga】	ON	PoE port delivers power
System indicator：SYS	1s slow flash	System operates normally

04 Installation

1.Check for any missing parts. If there is any omission, please contact us.
2.Check that power supply voltage is matching the power input requirements for switch, to avoid power damage
3.Ensure switch installation location meets ventilation and heat dissipation conditions.
4.Please keep the power off during installation to avoid potential safety hazards.
5.Please install the switch on a level surface to avoid mechanical damage.

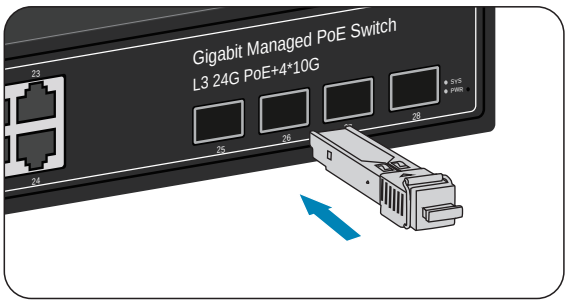
Port installation and connections

Insert data line



As shown in the figure, insert the RJ45 head of the data cable into the network port. When you hear a clear click, the RJ45 connector is successfully connected with the network port of the switch.

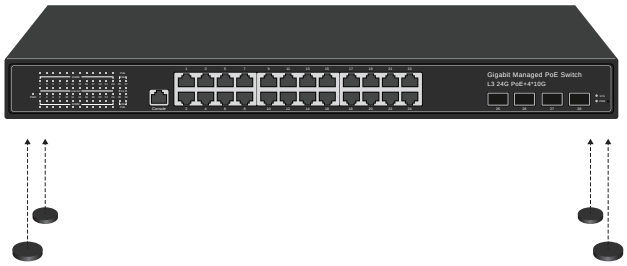
Install the fiber optic module



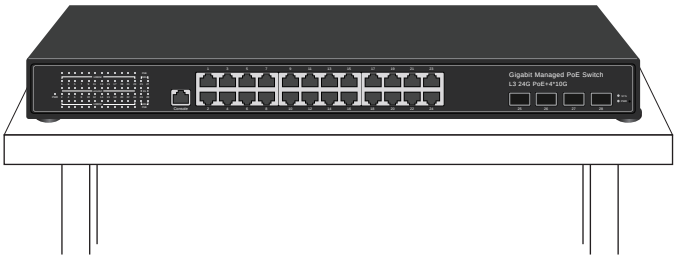
As shown in the figure, align the optical fiber module with the optical port of the SFP and insert it smoothly. When you hear a clear click, the optical fiber module has installed successfully.

Desktop installation

Attach the four non slip rubber pads that came with the device to the bottom corners of the switch.

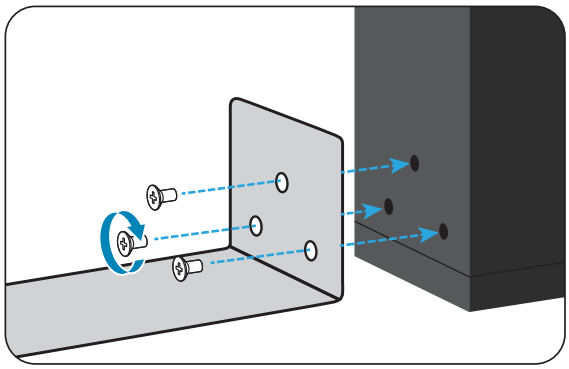


Place the switch on a horizontal desktop in a ventilated area.

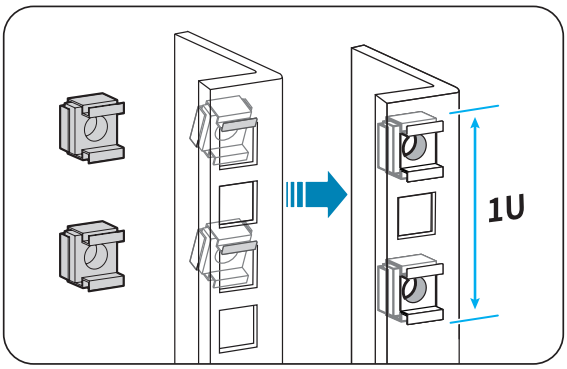


Installing to a cabinet / rack

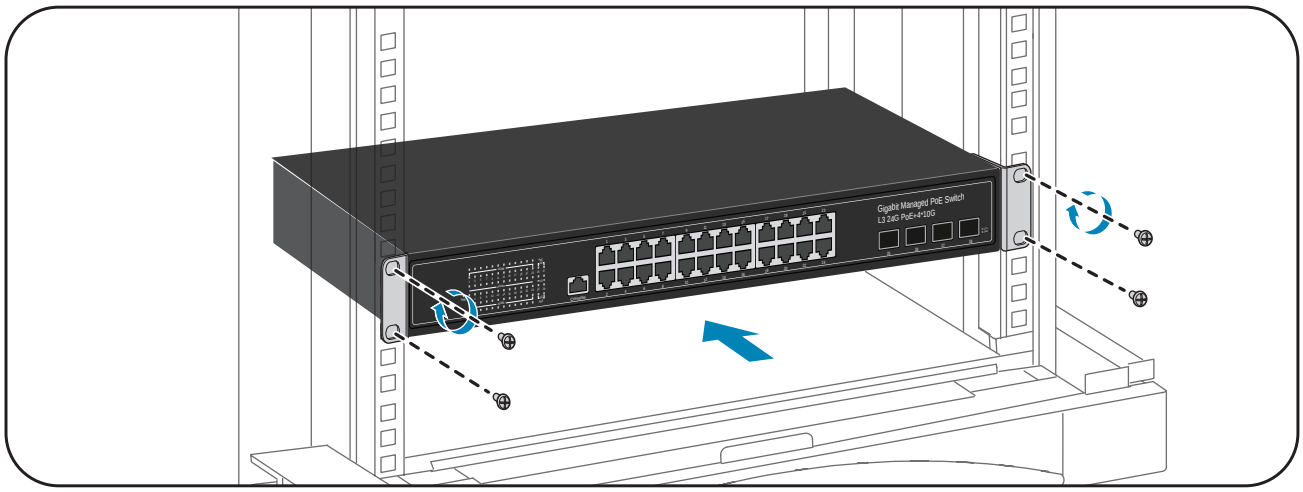
1.Install rack brackets to switch on both sides using provided screws



2.Install floating nuts on cabinet / rack

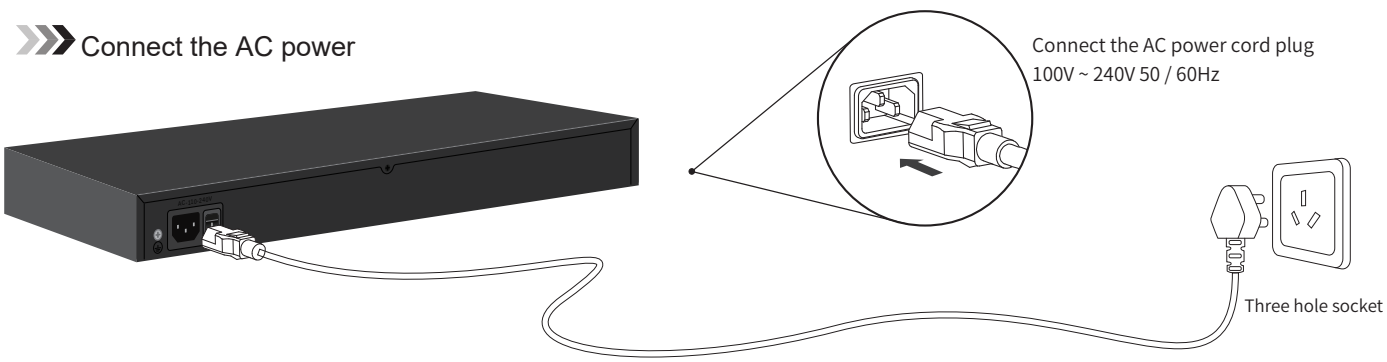


3. Put the switch with mounted brackets into the cabinet and screw on the rack screws to complete the installation



Powering on

Connect the AC power

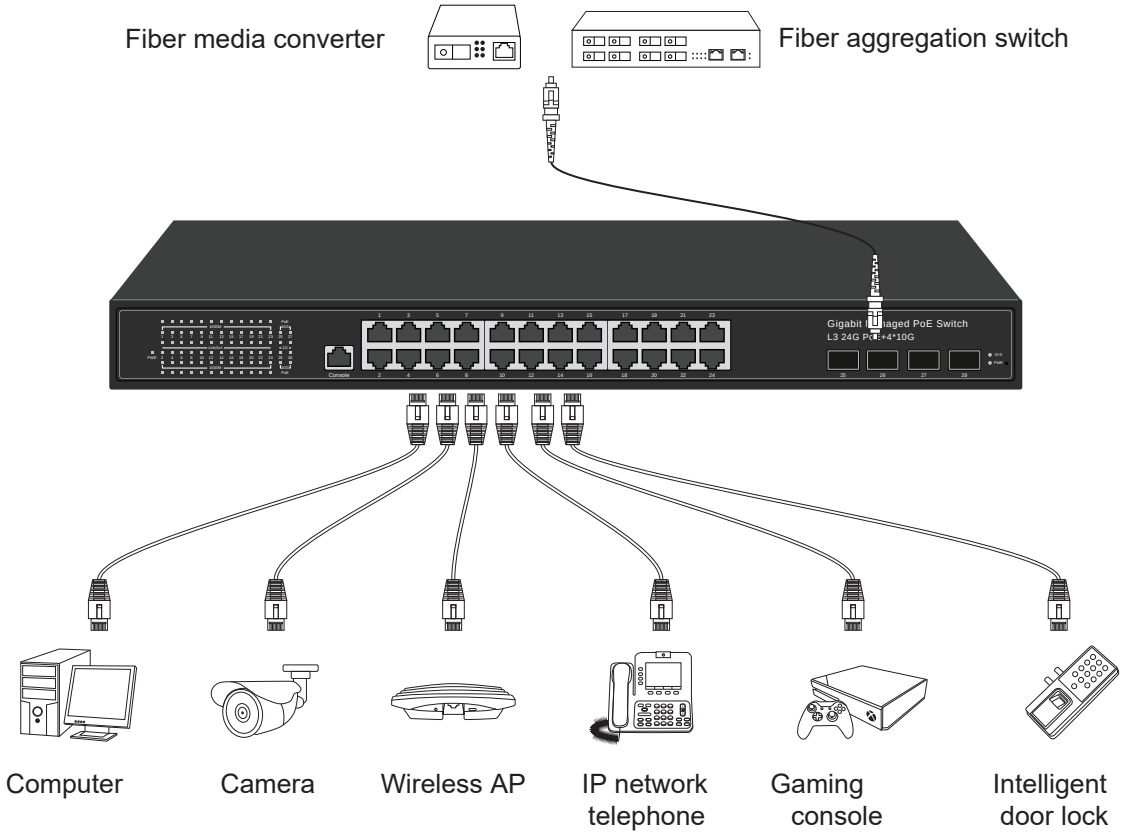


WARNING

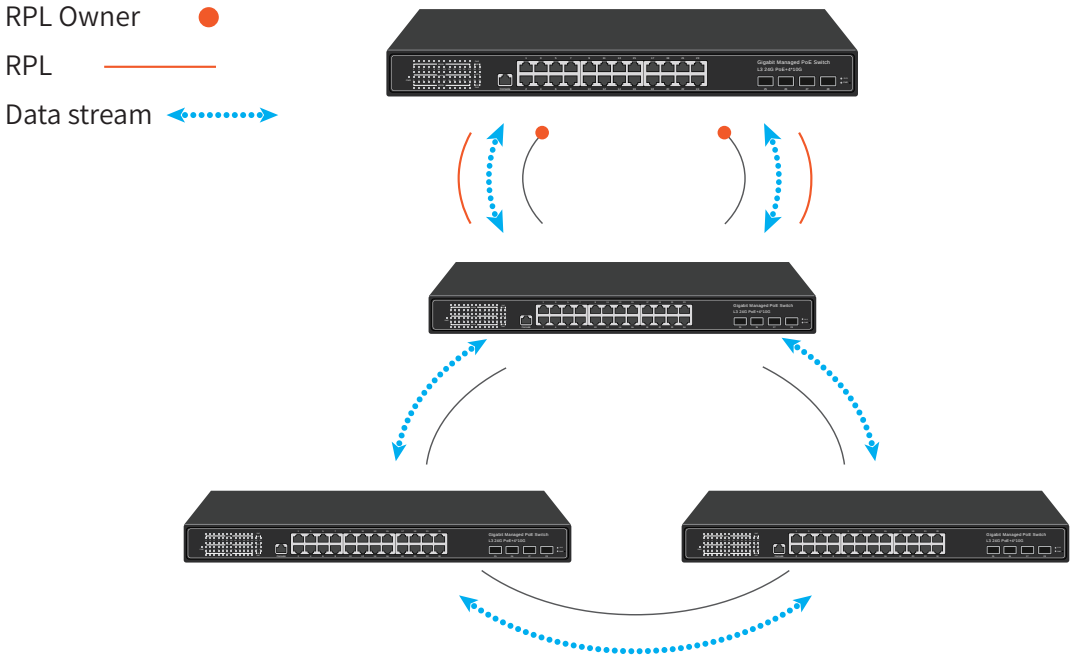
1.Do not stack heavy objects on top of switch.
2.To avoid risk of electric shock, do not open unit under operation or with the power still active.
3.Clean switch with dry soft cloth, do not use any liquid.
4.If the power cable is damaged please replace cable or contact us for a replacement cable.

05 Applications

VLAN application



Ring Network Application



06 Troubleshooting

⚠ *The PWR indicator is not on after the power is connected → Check for AC power cord plug to be fully plugged. Check AC power cord for damage and replace.*

⚠ *Switch cannot communicate after power up → Check for proper RJ45 link indicators. No link means network cable is not connected.*

⚠ *Switch network speed suddenly become very slow → Restart the switch.*

[If the above problems or other switch problems can not be solved, please contact us for technical support]

07 Technical Specifications

Product model	RB10-2404M-PSE
Product description	4x 10G SFP+ and 24x 10/100/100Base-Tx PoE+ managed switch
Fixed ports	24*10/100/1000Base-TX PoE Port (Data) 4*1G/10G SFP/SFP+
PoE ports	1-2 ports support Poe IEEE 802.3af/at/poe + + / BT 3-24 ports support Poe IEEE 802.3af/at
Supported standards	IEEE802.3af/at/PoE++/BT
Management port	1
Reset button	1
Network protocols	IEEE 802.3 IEEE 802.3u 100BASE-TX IEEE 802.3ab1000BASE-T IEEE 802.3x IEEE 802.3z 1000BASE-X IEEE 802.3ad IEEE 802.3q 、IEEE 802.3q/p IEEE 802.1w、IEEE 802.1d 、IEEE 802.1S STP(Spanning Tree Protocol) RSTP/MSTP(Rapid Spanning Tree Protocol) EPPS ring network protocol EAPS ring network protocol
Port Specifications	10 / 100 / 1000Base-Tx auto, full / half duplex MDI / MDI-X auto
Transmission Mode	Store and Forward(full wirespeed)
Bandwidth	128Gbps
Packet Forwarding	95.32Mpps
MAC Address	16K
Buffer	12M
Transmission Distance	10BASE-T： Cat3,4,5 UTP(≤250 meter) 100BASE-TX： Cat5 or later UTP(≤100 meter) 1000BASE-TX： Cat6 or later UTP(≤1000 meter)
FLASH	64M
RAM	256M
Total PoE budget	480W
LED Indicator	PWR:Power indicator SYS:(System indicator) 1~24（10 / 100M network connection indicator, 1000M network connection indicator） 25~28:(Optical port connection indicator)
Power	Built in switching power supplyAC 100~240V 50/60HZ
Operating Temperature/Humidity	-20～+55°C；5%～90% RH Non condensation
Storage Temperature/Humidity	-40～+75°C；5%～95% RH Non condensation

Product size/ package size（L*W*H）	440mm*290mm*45mm 515mm*375mm*95mm
N.W/G.W（kg）	2.5kg/2.8kg
Installation	Rack type (19" rack mounting brackets included)
Lightning protection / protection level	3KV 8/20us；IP30
Certificate	3C； CE mark, commercial；CE/LVD EN60950； FCC Part 15 Class B；RoHS；
Warranty	1 year (Accessories not included)