



SSE-T8032S

USER'S GUIDE

Revision 1.1

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Manual Revision 1.1

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Contents

Chapter 1: Introduction	6
1.1 Product Brief	7
Overview	7
Features and Benefits	7
Various Interfaces	8
400G Ethernet Support	8
Networking Protocols	8
ACL	8
QoS	8
Web Management	9
MPLS Ready	9
1.2 Description of Hardware	10
Front Panel	10
Console Description	10
Back Panel	10
1.3 Status LEDs	12
1.4 Port Description	15
1.5 Power Supply Module	16
1.6 Fan Module	17
1.7 System Specifications	18
Chapter 2: Installation Precautions	19
2.1 Regulatory Information	20
2.2 Switch Installation Notice	22
2.3 Environmental Requirements	23
Dust and Particles	23
Temperature and Humidity	24
Power Supply	24
Preventing Electrostatic Discharge Damage	25
Anti-Interference	26
Rack Configuration	26
2.4 Security Warnings	28

Chapter 3: Switch Installation	30
3.1 Installation Preparation	31
3.2 Device Installation	32
Installing the Switch	32
Installing the Switch with Slide Rails	32
Installing the Switch with a Fixed Bracket	35
Connecting the Console	38
OSFP Transceiver Installation	39
DAC Cable Connection	40
SFP+ Transceiver Installation	40
Copper Cable/Fiber Cable Connection	41
Installing Copper Cables	41
Installing Fiber Cables	42
AC Power Supply Connection	43
Earthing Cable Connection	44
Checking the Switch	44
Contacting Supermicro	45

Chapter 1:

Introduction

This chapter provides a brief outline of the functions and features of the SSE-T8032S switch.

1.1 Product Brief	7
Overview	7
Features and Benefits	7
1.2 Description of Hardware	10
Front Panel	10
Back Panel	10
1.3 Status LEDs	12
1.4 Port Description	15
1.5 Power Supply Module	16
1.6 Fan Module	17
1.7 System Specifications	18

1.1 Product Brief

This section provides a hardware overview and briefly describes the main features of the SSE-T8032S switch.

Overview	7
Features and Benefits	7

Overview

The SSE-T8032S switch is a 1U 19-inch rack mountable switch platform product and offers up to 32 800 Gbps OSFP ports that can be used for any combination of 10 GbE, 25 GbE, 40 GbE, 50 GbE, 100 GbE, 200 GbE, 400 GbE, and 2x 400 GbE interfaces. Designed with top performance in mind, the SSE-T8032S provides line-rate, high-bandwidth switching, filtering, and traffic queuing without data delay. Redundant power and fans, along with numerous high-availability features, ensure that the SSE-T8032S is always available for business-sensitive traffic.

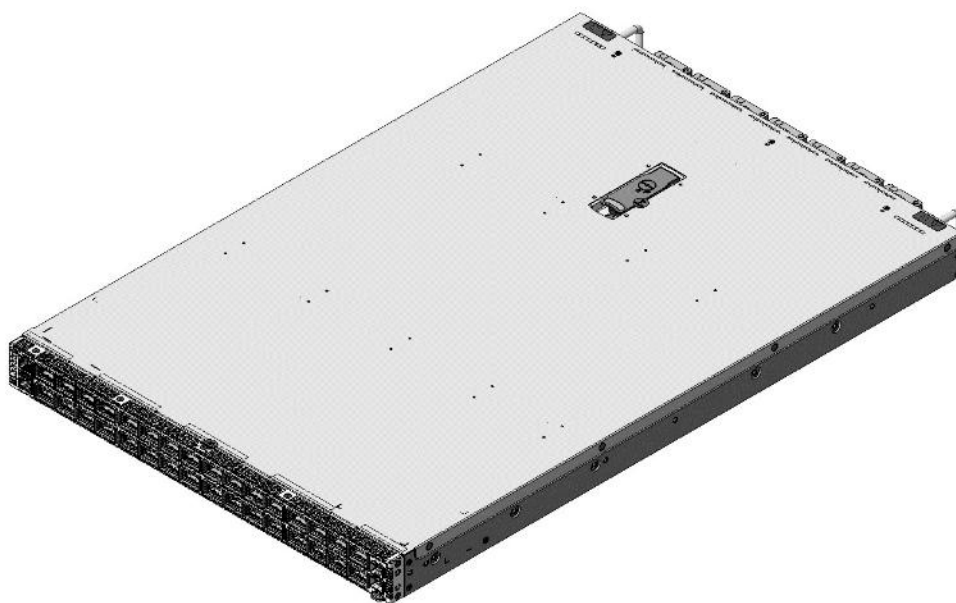


Figure 1-1. SSE-T8032S Switch

Features and Benefits

Note: Some of the following features are supported by the hardware, but may require Network Operating System software support to fully enable them.

Various Interfaces

The SSE-T8032S switch provides 32x 800 Gbps OSFP ports and 2x 10 Gbps SFP+ ports.

Each OSFP port shall be provided on the front side, supporting 10/25/40/50/100/200/400/2x 400 Gb Ethernet traffic.

The two SFP+ management ports operate at 10 GbE or 1 GbE.

400G Ethernet Support

400G Ethernet, which adopts full-duplex technology instead of low-speed, half-duplex CSMA/CD protocol, is a big leap in the evolution of Ethernet. 400G Ethernet can be deployed in star or ring topologies. With 400Gb Ethernet, the SSE-T8032S switch provides broad bandwidth and powerful processing capacity. It is suitable for metropolitan networks and wide area networks. Using the SSE-T8032S switch, users can simplify network structures and reduce the cost of network construction.

Networking Protocols

The SSE-T8032S switch supports 802.1d/w/s, 802.1Q, 802.1p, 802.3ad, 802.3x, GVRP, DHCP, and SNTP. The switch comprehensively supports multicast protocols such as IGMP, DVMRP, and PIM. Moreover, the SSE-T8032S switch supports RIPv1/2, OSPF, and IPv6. All these protocols enable the SSE-T8032S switch to meet the requirements of complex network constructions.

ACL

The SSE-T8032S switch supports comprehensive ACL policies. The traffic can be classified by source/destination IP address, source/destination MAC address, IP protocols, TCP/UDP, IP precedence, time ranges, and ToS. Various policies can be conducted to forward the traffic. By implementing ACL policies, users can filter virus packets such as “Worm.Blaster,” “Worm.Sasser,” and “Red Code.” The SSE-T8032S switch also supports IEEE802.1x port-based access authentication, which can be deployed with RADIUS, to ensure port-level security and block illegal users.

QoS

The SSE-T8032S switch fully supports DiffServ Module. Users can specify a queue bandwidth on each port. WRR/SP/SWRR scheduling is also supported. The SSE-T8032S supports port security. Users can deploy trusted CoS, DSCP, IP precedence, and port priority. The user can also modify packets’ DSCP and COS values. The traffic can be classified by port, VLAN, DSCP, IP precedence, and ACL table. Users can also modify packets’ DSCP and IP precedence values. Users can specify different bandwidths for voice/data/video to customize different qualities of service.

Web Management

The SSE-T8032S supports SNMP, In-band and Out-of-band Management, CLI and WEB interface, and RMON. It can mail the correlative sensitive information to the administrator abiding by SMTP protocol. The SSE-T8032S supports SSH protocol, ensuring the configuration management security of the switch. It adopted the LinkManager web management system for expedient and compact unified management.

MPLS Ready

The SSE-T8032S supports MPLS VPN, which can be used in metropolitan area networks and wide area networks, and supports wire speed forwarding. IPv6 and MPLS implement high-performance wire speed forwarding at the same time.

The SSE-T8032S supports LDP function and MPLS VPN (it can access the public network), and it can be deployed as PE and P.

1.2 Description of Hardware

This section provides a description of the SSE-T8032S switch hardware.

Front Panel	10
Back Panel	10

Front Panel

The following figure and table describe the ports on the front panel of the SSE-T8032S switch.

Important: The USB port only supports data transmission; it does not support a USB power supply.



Figure 1-2. Front Panel of the SSE-T8032S

Front Panel Ports of the SSE-T8032S	
QSFP Ports	32
SFP+ Ports	2
10/100/1000 M Base-T Ethernet Ports	1
Console Ports	1
USB 3.0 Ports	1

Console Description

The SSE-T8032S provides an RJ45 serial console port. The user can perform local and telnet configuration through this port. The console port supports asynchronous mode. Set the data bit to 8, the stop bit to 1, the parity bit to none, and the default baud rate to 115200 bps.

Back Panel

The back panel of the SSE-T8032S switch includes two redundant AC power modules and seven fan trays.

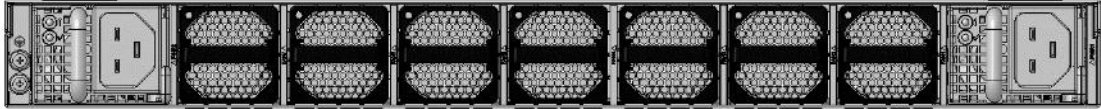


Figure 1-3. Back Panel of the SSE-T8032S

1.3 Status LEDs

Front Panel LEDs			
Indicator LED	Front Panel Sign	Status	Description
System status	STAT	Green and amber LED alternate blinking	The system is normal.
		Off	The system is powered off.
Fan status	FAN	Green LED on	All fans present and have the normal status.
		Amber LED on	One or more of the fans are absent or have an abnormal status.
		Off	The system is powered off.
PSU status	PWR	Green LED on	Both PSUs are present and have the correct status.
		Amber LED on	One or more of the PSUs are absent or have an abnormal status.
		Off	The system is powered off.
Alarm status	ALM	Green LED on	No alarm.
		Amber LED on	Critical alarm.
		Amber LED blinking at 4 Hz	Major alarm.
		Amber LED blinking at 1 Hz	Minor alarm.
		Off	The system is powered off.

Back Panel LEDs			
Indicator LED	Front Panel Sign	Status	Description
Fan module	FAN1-7	Green LED on	Fans present and status normal.
		Amber LED on	Fans present and status abnormal.
		Off	Fan module is powered off.
PSU module	PWR1/PWR2	Blue LED on	PSU modules are normal.
		Amber LED on	PSU error detected.
		Off	PSU module is powered off.

Port Indicator LEDs	
Indicator LED	Description
Management port	<p>One Management Port: 10BASE-T/100BASE-TX/1000BASE-T, based on the RJ45 physical interface. Use a PCIe-to-Ethernet bridge to connect to the CPU.</p> <p>This port has one green single-color LED on the left side and one dual-color green/amber LED on the right side.</p> <ul style="list-style-type: none"> • The green LED on the left indicates the Active status: <ul style="list-style-type: none"> • Green blinking: Port link active and port has traffic • LED off: Port has no traffic • The green/amber LED on the right indicates the link status: <ul style="list-style-type: none"> • Green on: Port link active in 1000M mode • Amber on: Port link active in 10/100M mode • LED off: Port link is down
SFP+ port	<p>Each SFP+ port has one dual-color green/amber LED.</p> <p>After power comes on, the port LEDs self-test and then turn off.</p> <p>After SDK/NOS run, the port LEDs indicate their status as follows:</p> <ul style="list-style-type: none"> • For port link in 10 GbE mode: <ul style="list-style-type: none"> • Green on: Port link up • Green blinking: Port link activity • LED off: Port link down • For port link in 1 GbE mode: <ul style="list-style-type: none"> • Amber on: Port link up • Amber blinking: Port link activity • LED off: Port link down

Port Indicator LEDs	
Indicator LED	Description
OSFP port	<p>Each OSFP port has two dual-color green/amber LEDs. The first LED corresponds to the first half ports, and the second LED corresponds to the second half ports.</p> <p>After power comes on, the port LEDs self-test and then turn off.</p> <p>After SDK/NOS run, the port LEDs indicate their status as follows:</p> <ul style="list-style-type: none"> • Green on: Port linked and operating at a lane speed of 100G; for example, 2x400 GbE. • Amber on: Port linked and operating at a lane speed of 50G or lower, for example at 50G 1x400 GbE or 4x100 GbE, or at 25G 2x100 GbE or 4x50 GbE. • Green blinking at 33 ms on and 33 ms off: Port activity operating at a lane speed of 100G. • Amber blinking at 33 ms on and 33 ms off: Port activity operating at a lane speed of 50G or lower. • Off: Link down. • For one port module, only the first LED is used: <ul style="list-style-type: none"> • For a module which can break down to two ports, the first LED covers port 1, while the second LED covers port 2. • For a module which can be broken down into four ports, the first LED covers ports 1 and 2, while the second LED covers ports 3 and 4. • For a module which can be broken down into eight ports, the first LED covers ports 1 through 4, while the second LED covers port 5 through 8. • If one LED indicates the status of a group of ports, the LED is solid on when any port is linked on, the LED blinks when any port has traffic, and the LED turns off when all port links are down.

1.4 Port Description

SSE-T8032S Port Description	
Port Mode	Specification
RJ45 port	<ul style="list-style-type: none"> • 10/100/1000 Mbps auto-negotiation • MDI/MDI-X cable mode auto-negotiation
Serial Console port	<ul style="list-style-type: none"> • Support at a minimum of 9600 and 115200 baud rates, eight data bits, one stop bit, and no parity
USB port	<ul style="list-style-type: none"> • USB 3.0 type A host interface
SFP+ port	<ul style="list-style-type: none"> • 10 GbE
OSFP port	<ul style="list-style-type: none"> • 32 OSFP 800 Gbps (2x 400 GbE) ports on the front panel • Complies with the latest revision of the OSFP MSA specification • Meets the 802.3ck specification for 400GAUI-4 C2M and 400GBase-CR4 • Meets the CEI-112G-VSR-PAM4 frequency domain requirement • Supports all breakout options available with Switch IC • Passive DAC (400GBase-CR4) performance up to 2 m, 26 AWG with FEC • Supports passive DAC performance: <ul style="list-style-type: none"> • Up to 2 m at 100G PAM4 speeds (IEEE802.3ck) • Up to 3 m at 50G PAM4 speeds (IEEE802.3cd)

1.5 Power Supply Module

The SSE-T8032S switch uses two redundant power supply modules.

The maximum power is 2000 W, the input is 100–240 VAC, and the output is 12 V +/- 5%. There is a fan and a handle on the back of the power supply for inserting or removing the module. The power supply module supports hot-plug.

Important: Do not mix power modules of different airflow directions. The airflow direction of the power supply modules must be the same as that of the fan modules.

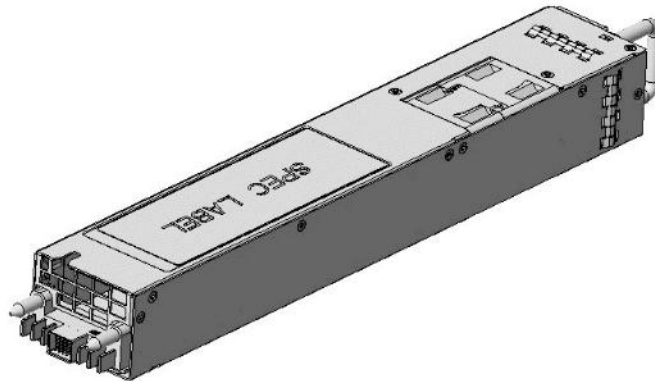


Figure 1-4. SSE-T8032S Power Module

1.6 Fan Module

The SSE-T8032S switch uses seven fan modules. The the rotating speed of the fan adjusts to adapt to the system temperature. It provides front-to-back airflow. The fan module is an assembly composed of a dual rotor fan, an LED light pipe, a fan connector, and a fan bracket.

Important: Do not mix fan modules of different airflow directions. The airflow direction of the fan modules must be the same as that of the power supply modules.

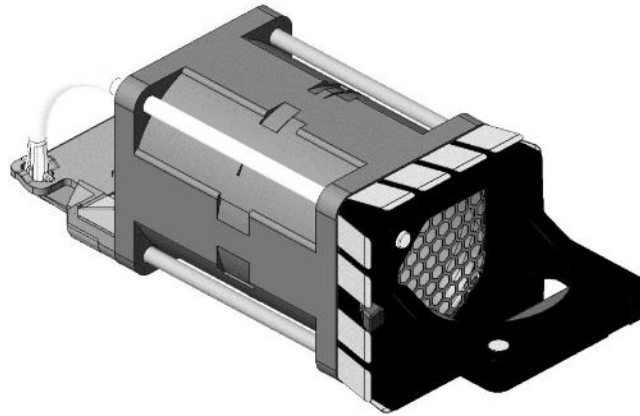


Figure 1-5. SSE-T8032S Power Module

1.7 System Specifications

System Specifications of the SSE-T8032S	
Attribute	SSE-T8032S
Dimensions	438.5 x 43.1 x 657.5 mm (WxHxD)
Weight	15.3 kg
Fixed ports	32 OSFP ports and two SFP+ ports
Management ports	One RJ45 serial port
Power input	100–127/200–240 VAC (50–60 Hz)
System consumption	1152/1870 W
Operating temperature	0°C to 40°C (Airflow from front to back)
Storage temperature	-40°C to 70°C
Operating relative humidity	5–85%, non-condensing
Storage relative humidity	5–95%, non-condensing

Chapter 2:

Installation Precautions

To ensure proper operation of the SSE-T8032S switch and physical security, carefully read the following installation guide.

2.1 Regulatory Information	20
2.2 Switch Installation Notice	22
2.3 Environmental Requirements	23
Dust and Particles	23
Temperature and Humidity	24
Power Supply	24
Preventing Electrostatic Discharge Damage	25
Anti-Interference	26
Rack Configuration	26
2.4 Security Warnings	28

2.1 Regulatory Information

- 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.
 2. This device must accept any interference received, including interference that may cause undesired operation.

Note: 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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it 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.

- Modifications: Any modifications made to this device that are not approved by Supermicro may void the authority granted to the user by the FCC to operate this equipment.
- This Class A digital apparatus complies with Canadian ICES-003.
 - Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
- This product conforms to the following European Directive(s) and Standard(s): Application of Council Directive: 2014/35/EU, 2014/30/EU, 2011/65/EU. Standards to which Conformity is declared: EN55022, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1. This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. Waste Electrical and Electronic Equipment (WEEE).
- In accordance with European Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE), the presence of the symbol below on the product or on its packaging indicates that this item must not be disposed of in the normal unsorted municipal waste stream. Instead, it is the user's responsibility to dispose of this product by returning it to a collection point designated for the recycling of electrical and electronic equipment waste. Separate collection of this waste helps to optimize the recovery and recycling of any reclaimable materials and reduces the impact on human

health and the environment. For more information concerning the correct disposal of this product, please contact your local authority or the retailer where this product was purchased.



Figure 2-1. WEEE Directive Symbol

- This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case, the user may be required to take corrective actions.

2.2 Switch Installation Notice

Read through these installation instructions carefully before operating on the SSE-T8032S switch. Make sure the installation materials and tools are prepared, and make sure the installation site is well-prepared.

- During the installation, users must use the brackets and screws provided in the accessory kit. Users must use the proper tools to perform the installation. Users must always wear antistatic uniform and ESD wrist straps. Users must use standard cables and connectors.
- After the installation, users must clean the site. Before powering on the switch, users must ensure the switch is well grounded. Users must maintain the switch regularly to extend the lifespan of the switch.
- In the event that power input needs to be removed, a readily accessible disconnect device should be incorporated in the building wiring installation.

2.3 Environmental Requirements

- The switch must be installed in a clean area. Otherwise, the switch might be damaged by electrostatic adherence.
- Maintain the airflow temperature front to back within 0°C to 40°C and the humidity within 5% to 85%, non-condensing.
- The switch must be put in a dry and cool place. Leave sufficient spacing around the switch for good air circulation.
- The switch must work in the AC power input range of 100–240 VAC (50/60 Hz).
- The switch must be well-grounded in order to avoid ESD damage and physical injury to people.
- The switch must avoid the sunlight perpendicular incidence. Keep the switch away from heat sources and strong electromagnetic interference sources.
- The switch must be mounted to a standard 19-inch rack or placed on a clean and level desktop.

Dust and Particles	23
Temperature and Humidity	24
Power Supply	24
Preventing Electrostatic Discharge Damage	25
Anti-Interference	26
Rack Configuration	26

Dust and Particles

Dust is harmful to the safe operation of the SSE-T8032S. Dust can lead to electrostatic adherence, especially likely under low relative humidity, causing poor contact of metal connectors or contacts. Electrostatic adherence will result in not only a reduced product lifespan, but will also increase the chance of communication failures. The recommended values for dust content and particle diameter at the site are shown in the table below.

Environmental Requirements: Dust				
Max Diameter (µm)	0.5	1	3	5
Max Density (particles/m ³)	1.4 x 10 ⁵	7 x 10 ⁵	2.4 x 10 ⁵	1.3 x 10 ⁵

In addition, salt, acid, and sulfide in the air are also harmful to the switch. Such harmful gases aggravate metal corrosion and the aging of some parts. The site must avoid harmful gases, such as SO₂, H₂S, NO₂, NH₃, etc. The table below details the threshold value.

Environmental Requirements: Particles		
Gas	Average (mg/m ³)	Max (mg/m ³)
SO ₂	0.2	1.5
H ₂ S	0.006	0.03
NO ₂	0.04	0.15
NH ₃	0.05	0.15

Temperature and Humidity

Although the SSE-T8032S switch is designed to use seven fans, the site must still maintain a desirable temperature and humidity. High humidity can cause electrical resistance degradation and even electric leakage. High humidity can also cause degradation of mechanical properties and corrosion of internal components. Extreme low relative humidity may cause the insulation spacer to contract, making the fastening screw insecure. Furthermore, in dry environments, static electricity is liable to be produced and cause harm to internal circuits. Temperature extremes can cause reduced reliability and premature aging of insulation materials, thus reducing the working lifespan of the switch. In hot summers, it is recommended to use air conditioners to cool down the site. In cold winters, it is recommended to use heaters.

Environmental Requirements: Temperature and Humidity	
Temperature (Airflow Front to Back)	Relative Humidity (Non-Condensing)
0°C to 40°C	5% to 85%

Important: A sample of ambient temperature and humidity must be taken at 1.5 m above the floor and 0.4 m in front of the switch rack, with no protective panel covering the front and back of the rack. Short-term working conditions refer to a maximum of 48 hours of continued operation and an annual cumulative total of less than 15 days. Formidable operation conditions refer to the ambient temperature and relative humidity value that may occur during an air-conditioning system failure, and normal operation conditions must be recovered within five hours.

Power Supply

Before powering on the power supply of the SSE-T8032S switch, check the power input to ensure proper grounding of the power supply system. The input source for the switch must be reliable and secure; a voltage adapter can be used, if necessary. The building's circuit

protection system should include in the circuit a fuse or circuit breaker of no greater than 240 V and 12.5 A. It is recommended to use a UPS for a more reliable power supply.

Important: To prevent personal injury or system damage, follow all precautions in the list below.

- Improper power supply system grounding, extreme fluctuation of the input source, and transients (or spikes) can result in a larger error rate, or even hardware damage.
- This product may come with more than one power cord. Disconnect power supply cords before servicing.
- This product is designed for use in power systems with a grounded neutral (ground return for stranded powered products). To reduce the risk of electric shock, do not plug the product into any other type of power system. If you are unsure of the type of electrical power used in your building, please contact your facility manager or a qualified electrician.
- Not all power cords have the same ampere rating. Do not use the power cord provided with the device for any other product or purpose. Do not use household extension cords with the product.
- When installing multiple power supplies in a system, refer to "[Preventing Electrostatic Discharge Damage](#)" below. The following warning label for the SSE-T8032S switch is affixed to the back around the PSU.



Figure 2-2. Power Supply Warning Label

Preventing Electrostatic Discharge Damage

Static electric discharges can cause damage to internal circuits, even the entire switch. Follow these guidelines for avoiding electrostatic discharge (ESD) damage to the SSE-T8032S switch:

- Ensure proper earth grounding of the device.
- Perform regular cleaning to reduce dust.
- Maintain proper temperature and humidity.
- Always wear an ESD wrist strap and antistatic uniform when in contact with circuit boards.

Anti-Interference

All sources of interference, whether from the SSE-T8032S switch itself or the outside environment, will affect operations in various ways, such as capacitive coupling, inductive coupling, electromagnetic radiation, common impedance (including the grounding system), and cables/lines (power cables, signal lines, and output lines). The following points should be noted:

- Precautions should be taken to prevent power source interruptions.
- Provide the system with dedicated grounding, rather than sharing the grounding with electronic equipment or lightning protection devices.
- Keep away from high-power radio transmitters, radar transmitters, and high-frequency strong circuit devices.
- Provide electromagnetic shielding, if necessary.

Rack Configuration

The dimensions of the SSE-T8032S switch are designed to be mounted on a standard 19-inch rack; ensure good ventilation for the rack.

Important: If a standard 19-inch rack is not available, the SSE-T8032S can be placed on a clean and level desktop. Ensure a clearance of 100 mm around the switch for ventilation, and do not place anything on top of the switch.

- Every device in the rack will generate heat during operation. Therefore, ventilation and fans must be provided for an enclosed rack, and devices must not be stacked closely. The stacking gap between adjacent devices must be ≥ 0.8 mm. (The SSE-T8032S is 1U height. Based on the requirement, it must support mounting 1U to 1U on a standard 19-inch rack.)
- When mounting devices in an open rack, care should be taken to prevent the rack frame from obstructing the switch ventilation openings. Be sure to check the positioning of the switch after installation to avoid such obstructions.
- The hole of the rack should be 9.5 mm square.
- The depth distance between rack posts is from 560 mm, +/- 2 mm, to 1066 mm, +/- 2 mm (22–42 in).

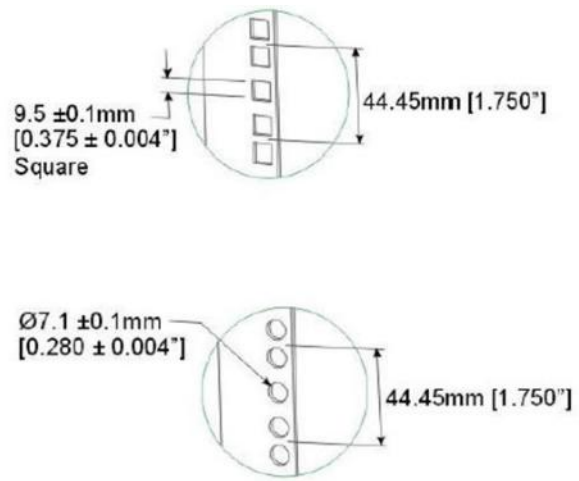


Figure 2-3. Rack Holes for the SSE-T8032S

2.4 Security Warnings

- Follow all cautions and instructions marked on the equipment.
- Ensure that the voltage and frequency of your power source match the voltage and frequency inscribed on the equipment's electrical rating label.
- Never push objects of any kind through openings in the equipment. Dangerous voltages may be present. Conductive foreign objects could produce a short circuit that could cause fire, electric shock, or damage to your equipment.
- This product is intended for restricted access whereby access is controlled by a means of security (for example, key, lock, tool, or badge access) and personnel authorized for access have been instructed on the reasons for the restrictions and any precautions that need to be taken.
- When using the OSFP transceiver, do not stare directly at the fiber bore when the switch is in operation. Otherwise, the laser may hurt your eyes.
- Do not attempt to conduct the operations which can damage the switch, or which can cause physical injury.
- Do not install, move, or disclose the switch and its modules when the switch is in operation.
- Do not open the switch shell.
- Do not drop metals into the switch. This can cause a short circuit.
- Do not touch the power plug and power socket.
- Do not place tinder near the switch.
- Do not configure the switch alone in a dangerous situation.
- Do not place anything on top of the switch.
- Use standard power sockets that have overload and leakage protection.
- Inspect and maintain the site and the switch regularly.
- Have an emergency power switch at the site. In case of emergency, turn off the power immediately.
- System can support an indefinite fan tray and PSU service time at an ambient temperature of 25°C. However, it cannot support an indefinite fan tray and PSU service time at an ambient temperature of 40°C. The replacement must be completed in 10 seconds at 40°C.

Important: Potential risks include electric leakage, power supply arcing, power line breakage, imperfect earth, overloaded circuits, and electrical short circuits. If electric shock, fire, or an electrical short circuit occurs, cut off the electricity supply and rapidly turn on the alarm. Rescue the injured person, as long as the area is safe to do so without further harm to others or yourself. Give the injured person proper first aid treatment for the injury, and seek urgent medical assistance.

Chapter 3:

Switch Installation

Read the following content for details on installing the SSE-T8032S switch.

3.1 Installation Preparation	31
3.2 Device Installation	32
Installing the Switch	32
Connecting the Console	38
OSFP Transceiver Installation	39
DAC Cable Connection	40
SFP+ Transceiver Installation	40
Copper Cable/Fiber Cable Connection	41
AC Power Supply Connection	43
Earthing Cable Connection	44
Checking the Switch	44

3.1 Installation Preparation

Carefully unpack the SSE-T8032S switch shipping package and verify all the contents inside.

The following additional tools and utilities are required for setup:

- Phillips screwdriver
- Flathead screwdriver
- ESD wrist strap
- Antistatic uniform

Note: These required tools and utilities are not included in the package.

3.2 Device Installation

This section provides information on rack and component installation for the SSE-T8032S switch.

Installing the Switch	32
Connecting the Console	38
OSFP Transceiver Installation	39
DAC Cable Connection	40
SFP+ Transceiver Installation	40
Copper Cable/Fiber Cable Connection	41
AC Power Supply Connection	43
Earthing Cable Connection	44
Checking the Switch	44

Installing the Switch

The SSE-T8032S switch can support two rail types: slide rail or fixed bracket.

Important: Given the weight of the SSE-T8032S, at least one other person must assist during installation or removal.

Installing the Switch with Slide Rails

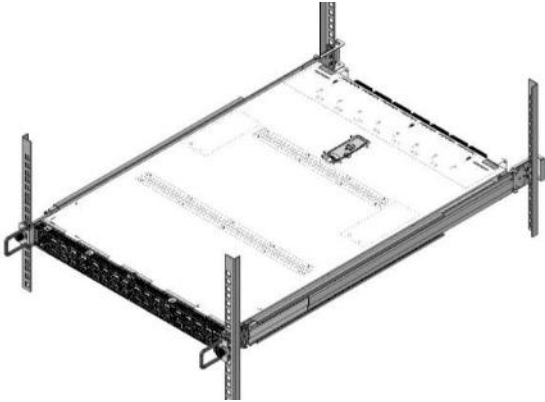


Figure 3-1. Installing the SSE-T8032S with Slide Rails

1. Attach the M4 standoff screws to the chassis. These screws are provided in the accessory kit.

Note: There are five pieces on each side, for a total of ten pieces.



Figure 3-2. M4 Standoff Screw Locations

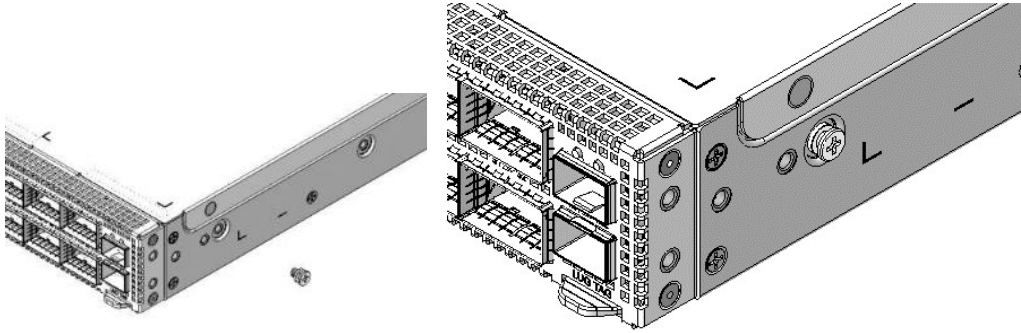


Figure 3-3. Installing the M4 Standoff Screws

2. Attach the inner rails to the chassis.

Note: There is one inner rail for each side of the chassis.

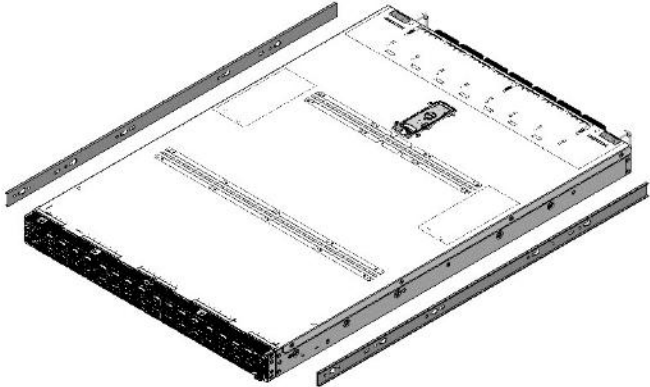


Figure 3-4. Inner Rail Installation Locations

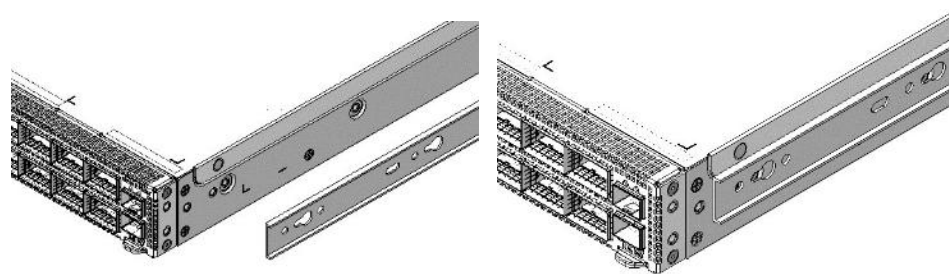


Figure 3-5. Installing the Inner Rails

3. Attach the ear-kits and the six countersunk screws (three screws on each side) which were provided in the accessory kit.

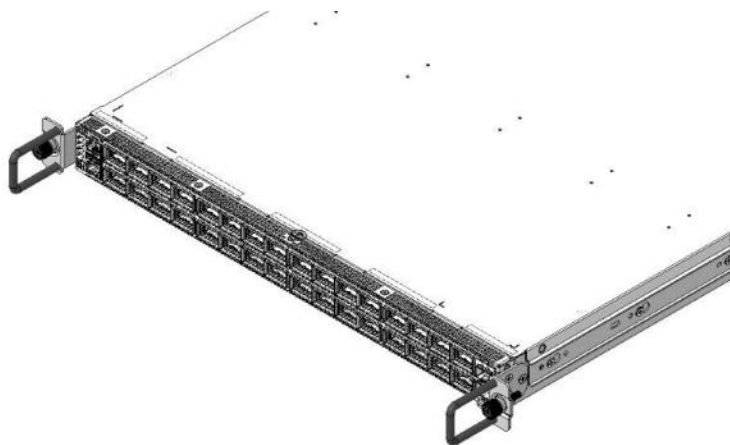


Figure 3-6. Installing the Ear-Kit

4. Attach the outer rails to the rack.

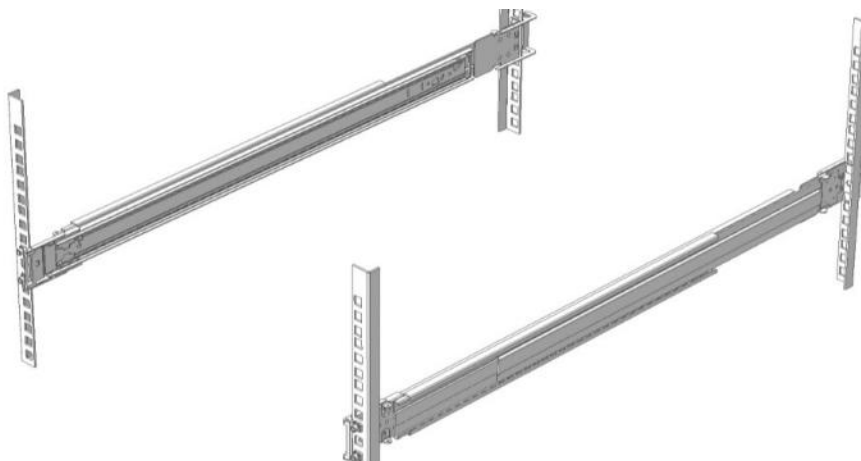


Figure 3-7. Installing the Outer Rails

5. Push the chassis inner rails smoothly into the outer rails. Then, fasten the thumbscrew, leaving enough space around the switch for good air circulation.

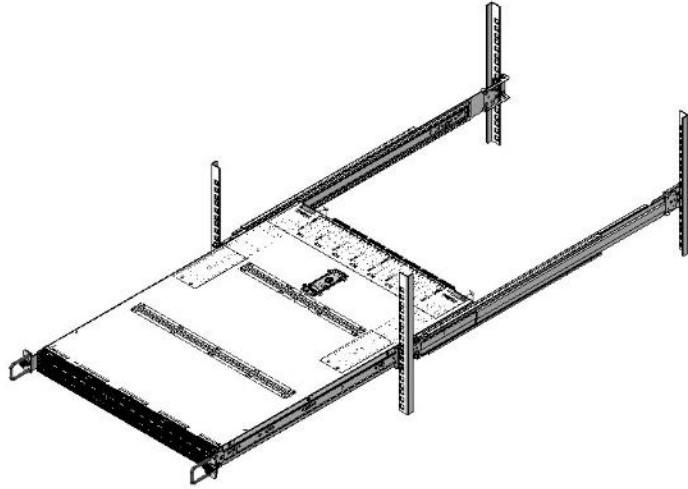


Figure 3-8. Placing Inner Rails into Outer Rails

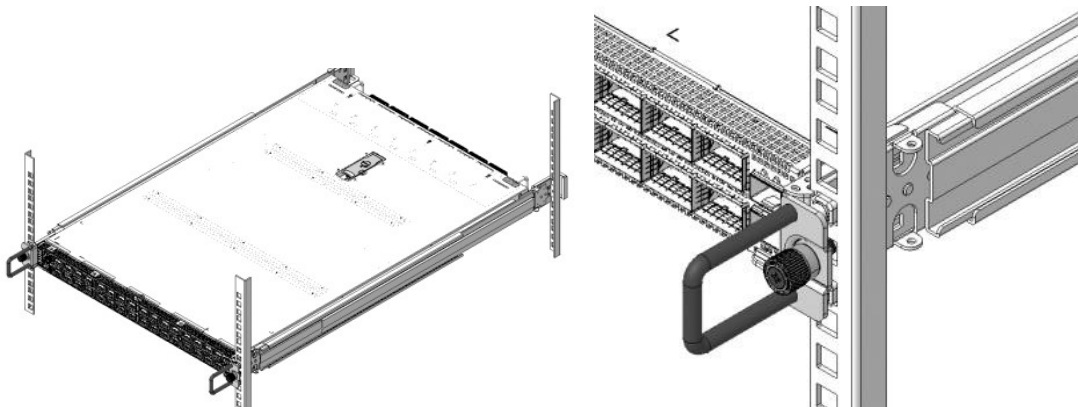


Figure 3-9. Pushing Inner Rails into Outer Rails and Fastening Thumbscrews

Installing the Switch with a Fixed Bracket

1. Attach the inner rail and the ear bracket of the fixed bracket to the equipment with 14 M4 countersunk screws (seven screws on each side).

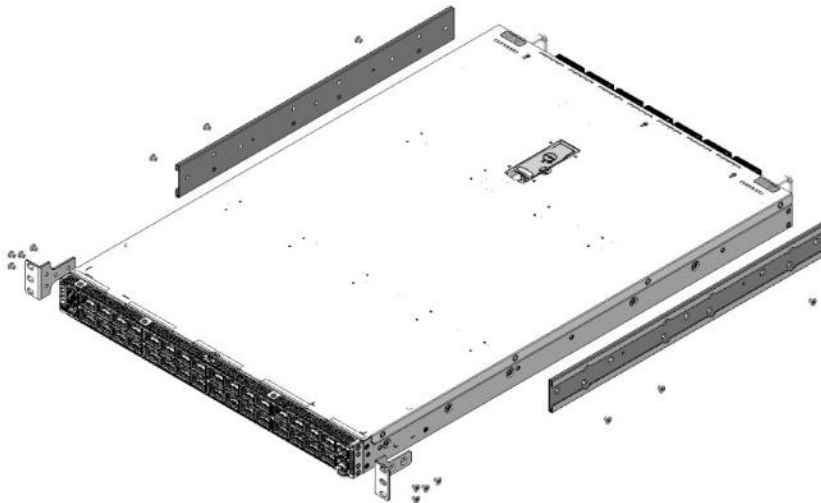


Figure 3-10. Installing the Inner Rails

2. Install eight cage nuts onto the rack.

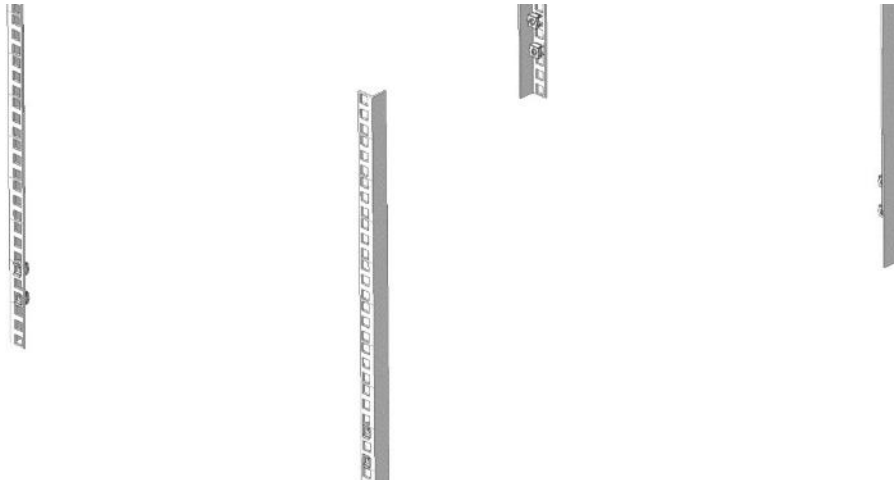


Figure 3-11. Cage Nut Installation Locations

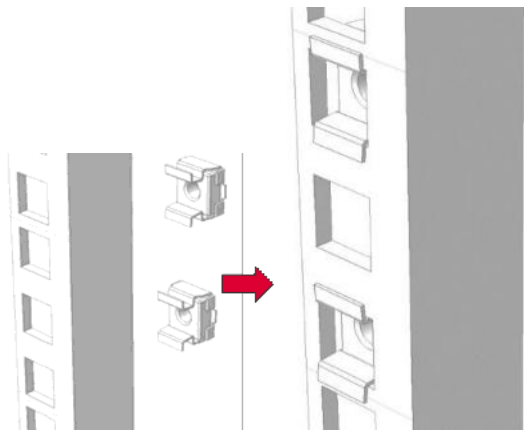


Figure 3-12. Installing Cage Nuts

3. Install the outer rail with four M6 screws.

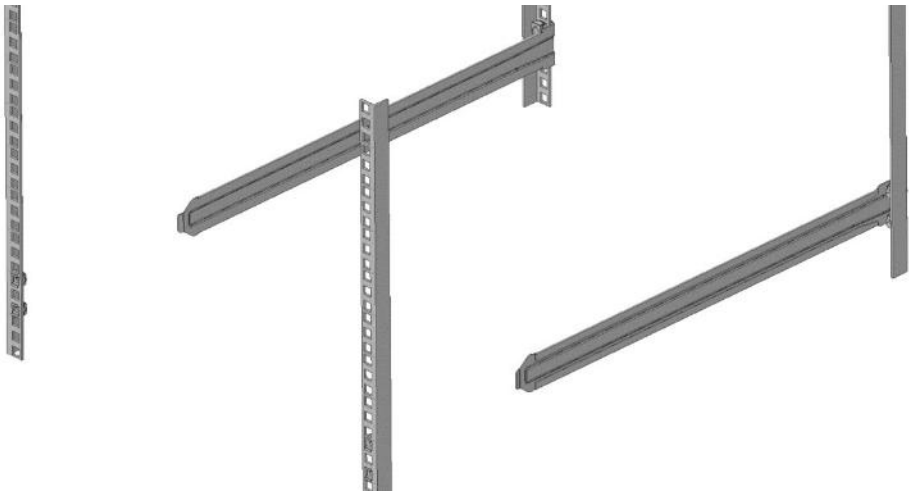


Figure 3-13. Outer Rail Installation Locations

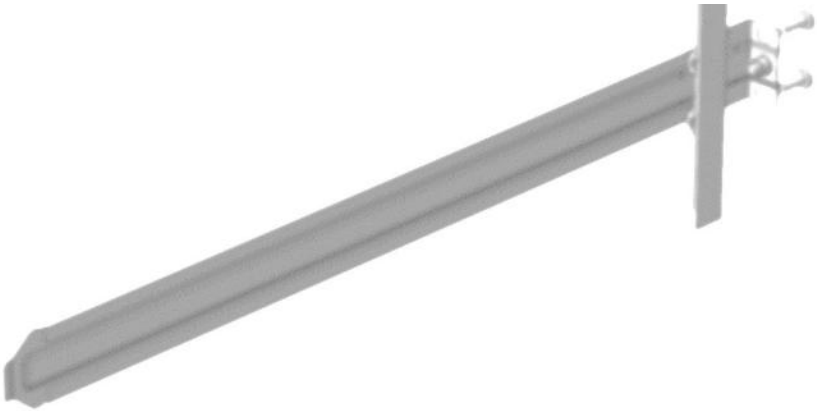


Figure 3-14. Installing the Outer Rails

4. Push the chassis inner rails smoothly into the outer rails. Then, fasten four M6 screws, leaving enough space around the switch for good air circulation.

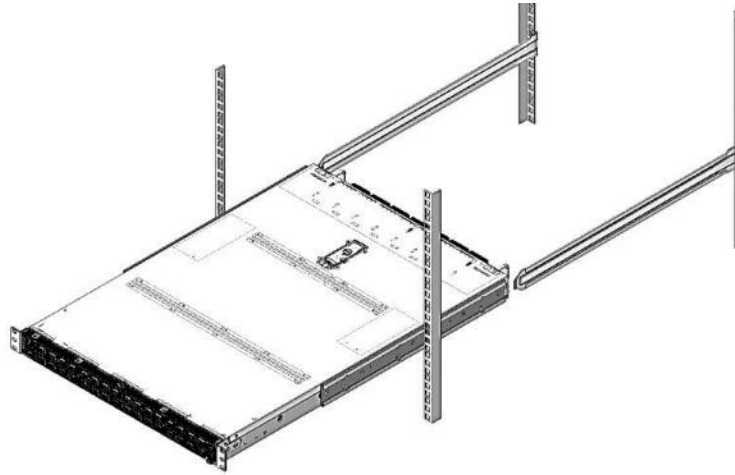


Figure 3-15. Placing Inner Rails into Outer Rails

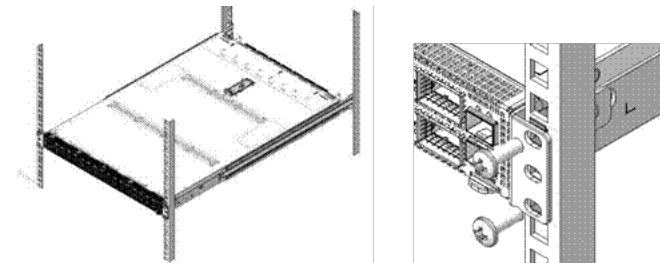


Figure 3-16. Pushing Inner Rails into Outer Rails and Fastening M6 Screws

Connecting the Console

The SSE-T8032S switch provides a serial console port.

1. Find the console cable provided in the accessory kit. Attach the console cable end to the console port of the switch.
2. Connect the other side of the console cable to a character terminal (PC).

Notes:

- Default serial terminal settings:
 - Baud rate: 115200
 - Data bits: 8
 - Stop bits: 1
 - Parity: None
 - Flow control: XON/XOFF
3. Power on the switch and the character terminal. Configure the switch through the character terminal.

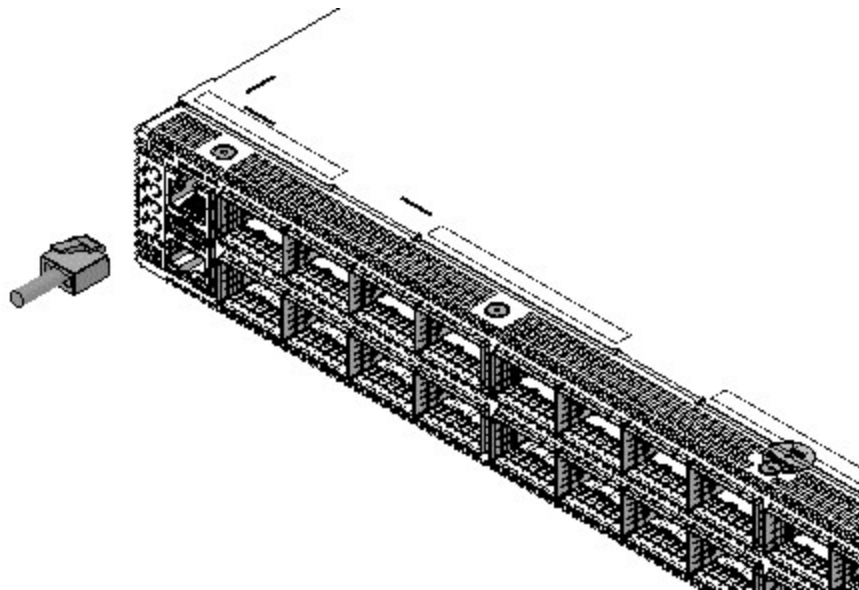


Figure 3-17. Connecting the Console to the SSE-T8032S

OSFP Transceiver Installation

The SSE-T8032S switch provides 32 OSFP ports.

Important: Do not stare directly at the two-fiber bore in the OSFP transceiver when the switch is in operation; the laser may hurt your eyes.

1. Put on an ESD wrist strap (or antistatic gloves).
2. Insert the OSFP transceiver into the guide rail inside the OSFP port. Do not install the OSFP transceiver upside down.

3. Push the OSFP transceiver along the guide rail gently until you feel the transceiver snap into place at the bottom of the OSFP port.

Note: The OSFP transceiver is hot-swappable.

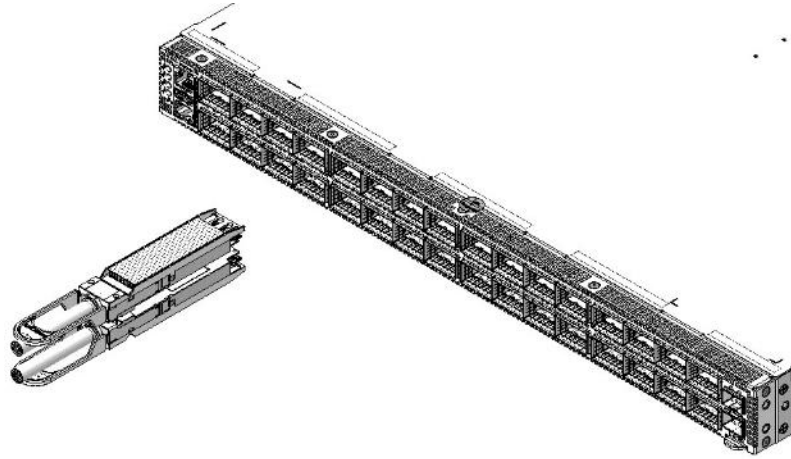


Figure 3-18. Connecting the OSFP Transceiver to the SSE-T8032S

DAC Cable Connection

1. Connect the two sides of the DAC cable to the OSFP transceiver of the SSE-T8032S switch.
2. Check the indicator light state of the light port. If the LINK light is on, it means the link is connected. If the LINK light is off, check the line connection.

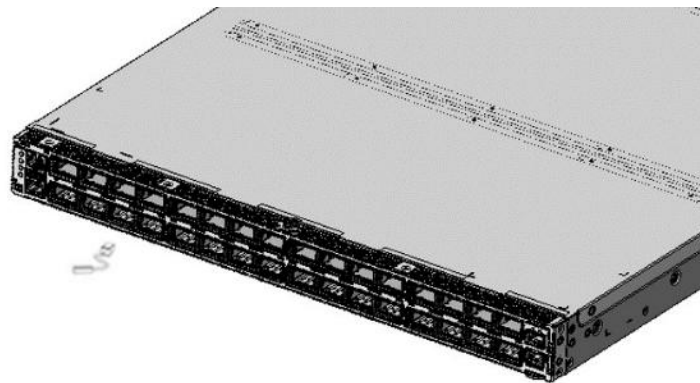


Figure 3-19. Connecting the DAC Cable to the SSE-T8032S

SFP+ Transceiver Installation

The SSE-T8032S switch provides two SFP+ ports.

Important: Do not stare directly at the two-fiber bore in the SFP+ transceiver when the switch is in operation; the laser may hurt your eyes.

1. Put on an ESD wrist strap (or antistatic gloves).
2. Insert the SFP+ transceiver into the guide rail inside the SFP+ port. Do not install the SFP+ transceiver upside down.
3. Push the SFP+ transceiver along the guide rail gently until you feel the transceiver snap into place at the bottom of the SFP+ port.

Note: The SFP+ transceiver is hot-swappable.

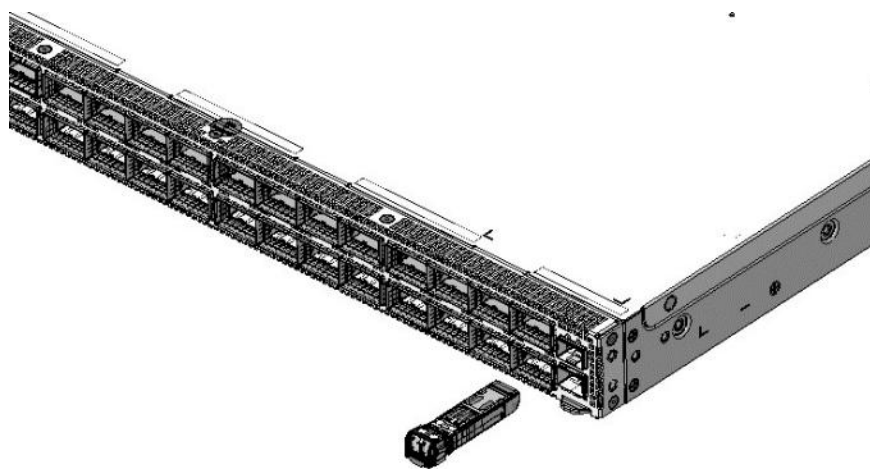


Figure 3-20. Connecting the SFP+ Transceiver to the SSE-T8032S

Copper Cable/Fiber Cable Connection

Installing Copper Cables

Important: Verify the sign above the port to ensure you are using the right port. Connecting to the wrong ports might damage the switch.

1. Insert one end of the Ethernet cable into the RJ45 Ethernet port in the switch copper port.
2. Insert the other end of the Ethernet cable into the RJ45 Ethernet port of another device.
3. Check all status indicators for the corresponding ports. A lit LED indicates that the link has been established; otherwise, the link is not ready and the cable should be examined.

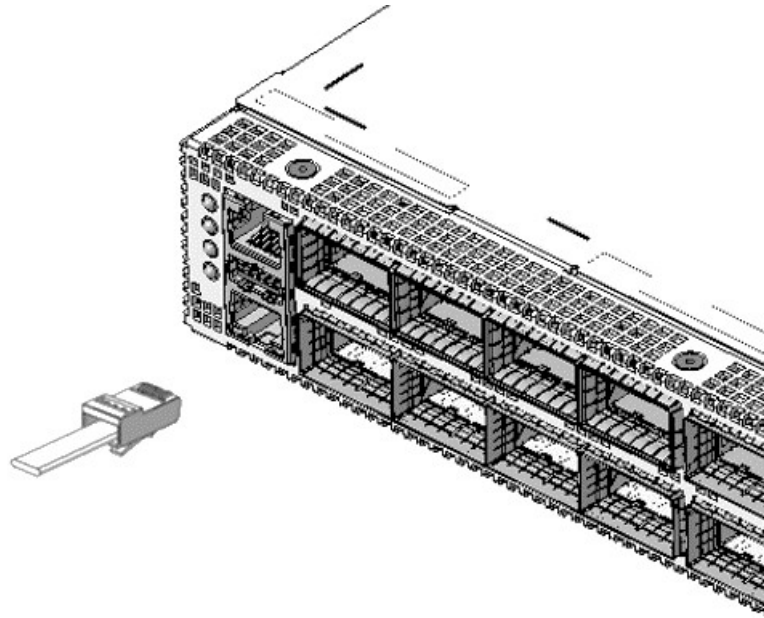


Figure 3-21. Connecting Copper Cables to the SSE-T8032S 800 Gb Routing Switch
Installing Fiber Cables

Important: Verify the sign above the port to ensure you are using the correct ports. Connecting to the wrong ports might damage the transceiver or the other ports. When connecting other devices through a fiber cable to the switch, the output power of the fiber cable must not exceed the maximum received power of the corresponding modules. Otherwise, it will damage the fiber transceiver.

Important: Do not stare directly at the two-fiber bore in the QSFP28 transceiver when the switch is in operation; the laser may hurt your eyes.

1. Remove the protective plug from the OSFP fiber transceiver bore. Remove the protective cap from one end of the fiber cable. Keep the fiber end clean and neat.
2. Attach one end of the fiber cable to the OSFP transceiver, and attach the other end to the transceiver of the corresponding devices.

Note: The OSFP transceiver's TX port should be connected to the RX port of the corresponding device, and vice versa.

3. Check the fiber port status indicator. A lit LED indicates that the link has been established; otherwise, the link is not ready and should be examined.

AC Power Supply Connection

The SSE-T8032S switch uses 220 VAC power supplies. For detailed information, read the power input specification.

Important: PSU Auto-ranging of 100–127 V and 200–240 V is supported. The system should fully operate with only one AC PSU functioning. 100–127 VAC input PSUs do not support to 1+1 redundancy. The input voltage must be within the required range; otherwise, the switch could be damaged or malfunction. Do not open the switch shell without permission; this can cause physical injury. Disconnect all power supply cords before servicing.

1. Insert one end of the power cable provided in the accessory kit into the power source socket, and the other end into the power reception socket of the switch (with overload and leakage protection).
2. Check the power status indicator on the front panel of the switch. The corresponding PWR indicator should light up. The SSE-T8032S is self-adjustable for the input voltage. As soon as the input voltage is in the range printed on the switch surface, the switch can operate correctly.
3. When the switch is powered on, it executes a self-test procedure and starts up.

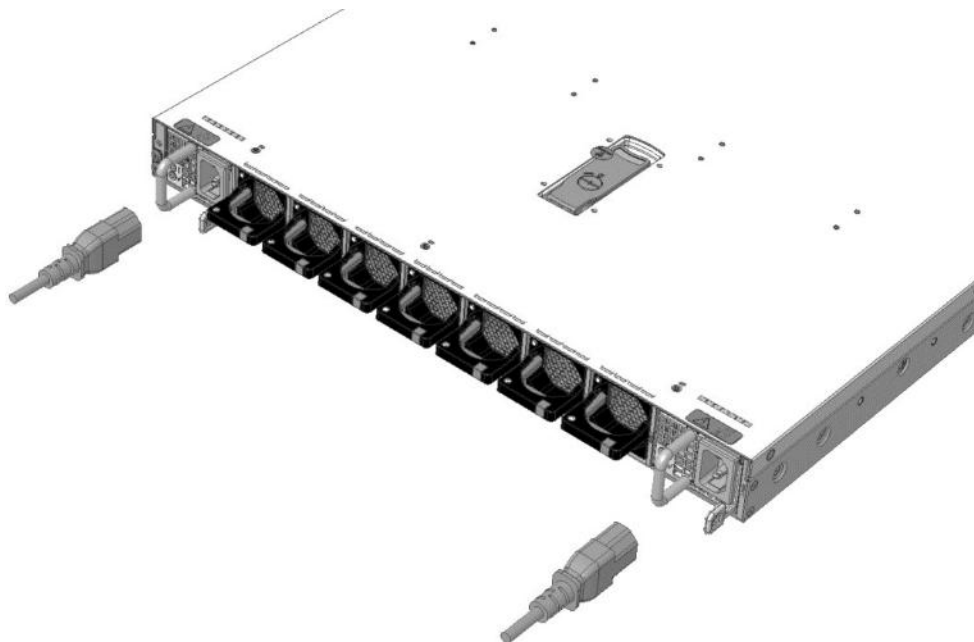


Figure 3-22. Connecting the Power Supply Cable to the SSE-T8032S Switch

Earthing Cable Connection

Important: The unit shall be permanently connected to earth.

1. Cover one side of the earthing cable to the earthing pillar of the back panel.
2. Attach the nut on the earthing pillar of the switch with the screws fixed on the chassis.
3. Connect another side of the earthing cable to the earthing side.

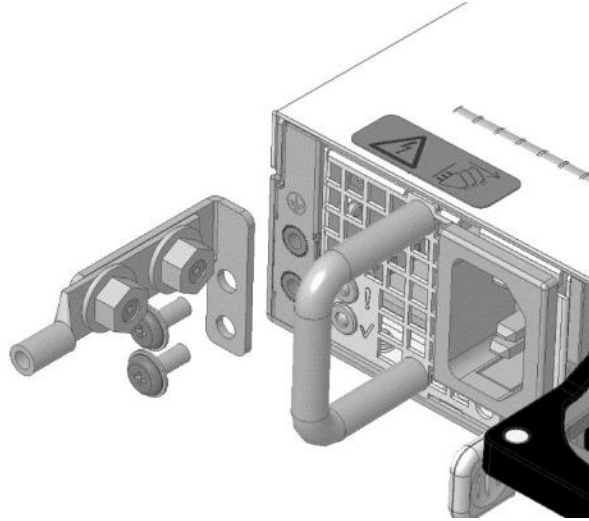


Figure 3-23. Connecting the Earthing Cable to the SSE-T8032S Switch

Checking the Switch

After installing the SSE-T8032S switch, run the following checks:

- Check whether the used power corresponds to the power of the sign.
- Check whether the ground cable is connected.
- Check whether the console cable connects correctly to the power cable.
- If there are cables outdoors, ensure the cable is well-connected with lightning protection devices.

Contacting Supermicro

Headquarters

Address: Super Micro Computer, Inc.
980 Rock Ave.
San Jose, CA 95131 U.S.A.

Tel: +1 (408) 503-8000

Fax: +1 (408) 503-8008

Email: Marketing@supermicro.com (General Information)
Sales-USA@supermicro.com (Sales Inquiries)
Government_Sales-USA@supermicro.com (Gov. Sales Inquiries)
Support@supermicro.com (Technical Support)
RMA@Supermicro.com (RMA Support)
Webmaster@supermicro.com (Webmaster)

Website: <https://www.supermicro.com>

Europe

Address: Super Micro Computer B.V.
Het Sterrenbeeld 28, 5215 ML
's-Hertogenbosch, The Netherlands

Tel: +31 (0) 73-6400390

Fax: +31 (0) 73-6416525

Email: Sales_Europe@supermicro.com (Sales Inquiries)
Support_Europe@supermicro.com (Technical Support)
RMA_Europe@supermicro.com (RMA Support)

Website: <https://www.supermicro.nl>

Asia-Pacific

Address: Super Micro Computer, Inc.
3F, No. 150, Jian 1st Rd.
Zhonghe Dist., New Taipei City 235 Taiwan (R.O.C)

Tel: +886 (2) 8226-3990

Fax: +886 (2) 8226-3992

Email: Sales-Asia@supermicro.com.tw (Sales Inquiries)
Support@supermicro.com.tw (Technical Support)
RMA@supermicro.com.tw (RMA Support)

Website: <https://www.supermicro.com.tw>