



**SSE-C3632S**  
**SSE-C3632SR**



## **Switch Installation Guide**

Revision 1.0a

# Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide

The information in this Installation Manual has been carefully reviewed and is believed to be accurate. The vendor assumes no responsibility for any inaccuracies that may be contained in this document, makes no commitment to update or to keep current the information in this manual, or to notify any person or organization of the updates. Please Note: For the most up-to-date version of this manual, please see our web site at [www.supermicro.com](http://www.supermicro.com).

Super Micro Computer, Inc. ("Supermicro") reserves the right to make changes to the product described in this manual at any time and without notice. This product, including software, if any, and documentation may not, in whole or in part, be copied, photocopied, reproduced, translated or reduced to any medium or machine without prior written consent.

IN NO EVENT WILL SUPERMICRO BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, SPECULATIVE OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OR INABILITY TO USE THIS PRODUCT OR DOCUMENTATION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN PARTICULAR, SUPERMICRO SHALL NOT HAVE LIABILITY FOR ANY HARDWARE, SOFTWARE, OR DATA STORED OR USED WITH THE PRODUCT, INCLUDING THE COSTS OF REPAIRING, REPLACING, INTEGRATING, INSTALLING OR RECOVERING SUCH HARDWARE, SOFTWARE, OR DATA.

Any disputes arising between manufacturer and customer shall be governed by the laws of Santa Clara County in the State of California, USA. The State of California, County of Santa Clara shall be the exclusive venue for the resolution of any such disputes. Super Micro's total liability for all claims will not exceed the price paid for the hardware product.

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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

California Best Management Practices Regulations for Perchlorate Materials: This Perchlorate warning applies only to products containing CR (Manganese Dioxide) Lithium coin cells. Perchlorate Material-special handling may apply. See [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate) for further details.

**WARNING:** HANDLING OF LEAD SOLDER MATERIALS USED IN THIS PRODUCT MAY EXPOSE YOU TO LEAD, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

Manual Revision 1.0a

Release Date: August 19, 2020 5:49 PM

Unless you request and receive written permission from Super Micro Computer, Inc., you may not copy any part of this document.

Information in this document is subject to change without notice. Other products and companies referred to herein are trademarks or registered trademarks of their respective companies or mark holders.

**Copyright © 2020 by Super Micro Computer, Inc.**

**All rights reserved.**

**Printed in the United States of America**

# Preface

## About this Manual

This manual is written for professional system integrators, Information Technology professionals, service personnel, technicians and network administrators who are responsible for installing and setting up network equipment; consequently, it assumes a basic working knowledge of LANs (Local Area Networks). It provides information for the installation and use of the Supermicro's SSE-C3632R and SSE-C3632SR switches. Installation and maintenance should be performed by experienced professionals only.

## Manual Organization

### **Chapter 1: Introduction**

The first chapter provides an introduction to the switch.

### **Chapter 2: Safety**

The second chapter provides important safety information for the switch.

### **Chapter 3: Installation Requirements**

This chapter covers installation requirements, notices and security warnings for the switches.

### **Chapter 3 Device Installation**

Use this chapter for installation of the switches and connecting them to your systems.

## Table of Contents

<b>Chapter 1. Introduction</b>	<b>6</b>
1.1 Overview	6
1.2 Features and Benefits	7
Various Interfaces	7
Supports 100Gbs Ethernet	7
Different Airflow Options	7
1.3 Hardware	8
Front Panel	8
Back Panel	9
1.4 Status LEDs	9
1.5 Port Description	10
1.6 Power Supply Module	11
800W Power Module	11
1.7 Fan Module	11
1.8 System Specifications	12
<b>Chapter 2. Standardized Warning Statements</b>	<b>13</b>
2.1 About Standardized Warning Statements	13
<b>Chapter 3. Installation Notices</b>	<b>25</b>
3.1 Environmental Requirements	25
Dust and Particles	25
Temperature and Humidity	26
Power Supply	27
Preventing Electrostatic Discharge Damage	27
Anti-interference	27
Rack Configuration	28
3.2 Installation Notice	28
3.3 Security Warnings	29
<b>Chapter 4. Device Installation</b>	<b>30</b>
4.1 Installation Preparation	30
Verify the Package Contents	30

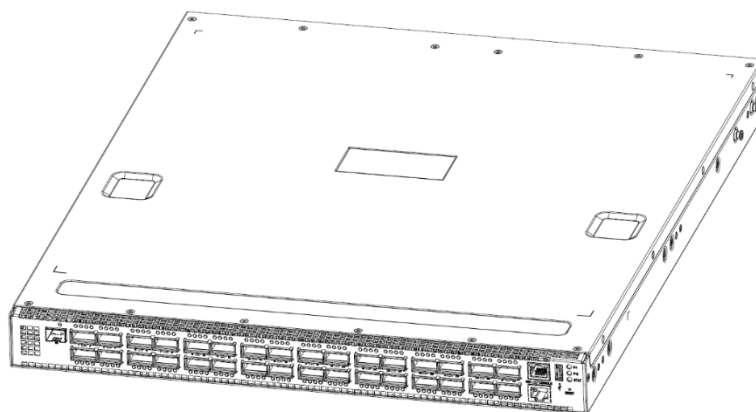
Required Tools and Utilities .....	30
<b>4.2 Device Installation.....</b>	<b>31</b>
Installing the Switch.....	31
Installation with Mounting Rails .....	32
Installing the Power Supply Module .....	33
Installing the Fan.....	34
Connecting the Console.....	35
QSFP28 Transceiver Installation.....	36
Copper Cable/Fiber Cable Connection .....	36
AC Power Supply Connection .....	38
Grounding Cable Connection.....	39
Checking the Switch.....	40

# Chapter 1. Introduction

## 1.1 Overview

The Supermicro SSE-C3632S and SSE-C3632SRS switches are at the top of the Supermicro bare metal switch line. A new generation of 100G Ethernet routing switches, they enable a robust layer-3 IP fabric with a flexible layer-2 overlay in an optimized Ethernet architecture. They are well-suited to function as the high-speed spine layer, giving scalable bi-sectional fabric bandwidth for leaf layer switches like the SSE-X3648S or even the SSE-G3648B. The ability to configure the individual physical Ethernet QSFP28 ports as either 40Gbps or 100Gbps, gives optimum flexibility for high-speed physical connectivity between the spine and leaf layers in the data center Ethernet fabric.

These switches incorporate 100GE switching technology and are particularly appropriate for use in large-scale data centers to provide 100GE server connectivity as well as high-bandwidth connectivity to other Ethernet switching products. Redundant hot-swappable power supplies (standard) are but one of the many features making them attractive for use in the modern data center. They are ideal as a distribution layer switch for campus networks, enterprise networks and High Performance Computing (HPC) networks; as well as a core layer switch for small to medium-sized networks. Preloaded with Open Networking Installation Environment (ONIE) they are optimized for use in an Open Networking environment.



**Figure 1-1. SSE-C3632S and SSE-C3632SR Switches**

## 1.2 Features and Benefits

### Various Interfaces

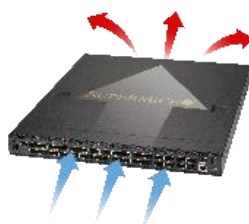
The SSE-C3632S and SSE-C3632SR switches provide thirty-two 100Gbs QSFP28 ports. Each QSFP28 port can be split into four 25Gbs SFP28 ports. Each QSFP28 port can alternatively be configured at 40Gbps – which in turn can be split into four 10Gbps SFP+ ports.

### Supports 100Gbs Ethernet

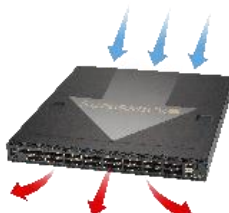
100Gbs Ethernet is a big leap in the evolution of Ethernet. 100Gbs Ethernet can be deployed in leaf-and-spine topologies. With 100Gbs Ethernet, the SSE-C3632S and SSE-C3632SR switches provide high bandwidth and powerful processing capacity. Using SSE-C3632S and SSE-C3632SR switches, users can simplify network structures and reduce the cost of network construction.

### Different Airflow Options

The SSE-C3632S provides “front-to-back” air flow (port-side to power-supply side) for cooling – sometimes called “normal air flow”. The SSE-C3632SR provides air flow in the opposite direction (“reverse air flow”). Reverse air flow is particularly useful in data centers with alternating “hot” and “cold” aisles because it allows the switch to be installed in the rear of a rack facing the “hot” aisle. This is the side of the rack where networking cables are typically attached to servers.



**Figure 1-2. Regular Air Flow**



**Figure 1-3. Reverse Air Flow**

## 1.3 Hardware

### Front Panel

The front panel descriptions of SSE-C3632S and SSE-C3632SR switches are given in the following table.

**Panel Descriptions of the SSE-C3632S/SR Switches**

Type	QSFP28 Port	10/100/1000Base-T ETHERNET Port	Console Port	USB 2.0 Interface
SSE-C3632S and SSE-C3632SR	32	1	1	1

The front panel of the SSE-C3632S/R is shown below:



**Figure 1-4. Front Panel View**

**Caution:** The USB port only supports data transmission, it does not supply USB power.

### Console Description

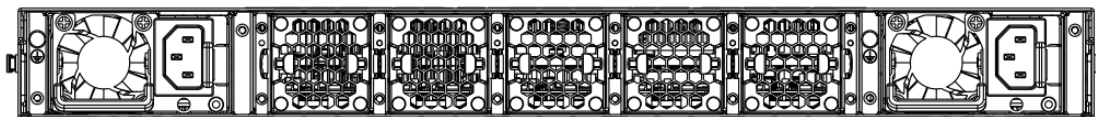
SSE-C3632S and SSE-C3632SR switches provide an RJ-45 serial console port. Users can perform local and telnet configuration through this port.

The console port supports asynchronous mode: set the data bit as 8, the stop bit as 1, the parity bit as none. The default baud rate is 115200bps.



## Back Panel

The back panel of the SSE-C3632S/R includes two (redundant) alternating current power modules and five fans.



**Fig 1-5. Back Panel View**

### 1.4 Status LEDs

The front panel of the SSE-C3632S/R has 128 QSFP28 port indicator lights, two power supply indicator lights and system automatic diagnostic LEDs. They are shown below and described in the following tables.

**Indicator Lights on the Front Panel of the SSE-C3632S/R Switches**

Indicator Light	Front Panel Sign	In State	Meaning
Power supply indicator light	P-1/P-2	Green light always on	Power supply module is operating normally.
		Out	No power supply or power fault.
System status indicate LED	START	Green light always on	The system is powered on and operating normally.
		Out	The system is powered off.

**Indicator Lights on the Rear Panel of the SSE-C3632S/R**

Indicator Light	Rear Panel Sign	State	Meanings
Fan Module Indicator Light	FAN1/FAN2/ FAN3/FAN4/ FAN5	Green light always on	Fan module is operating normally.
		Red light always on	No fan module or fan speed is 0.
		Out	Fan module is powered off.

## Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide

### Port Indicator Lights on the Front Panel of the SSE-C3632S/R

Indicator Light	Panel Sign	State
ETHERNET Port Link Light (Left)	Green light wink	The port is transmitting data.
	Out	There is no data transmitting on the port.
ETHERNET Port Activity Light (Right)	Yellow light always on	The port is configured at 10Mbps/100Mbps speed
	Green light always on	The port is configured at 1000Mbps speed
	Out	No connection or failure to connect.
Indicator Light of QSFP28 Port	Green light always on	The port is connecting at 100Gbps.
	Amber light always on	The port is connecting at 4x25G.bps
	Wink	The port is transmitting data.
	Red light always on	There is a fault on the port.
	Out	No connection or failure to connect.

## 1.5 Port Description

The SSE-C3632S/R provides 32 100Gb QSFP28 ports. Each is described below:

### SSE-C3632S/R Port Description

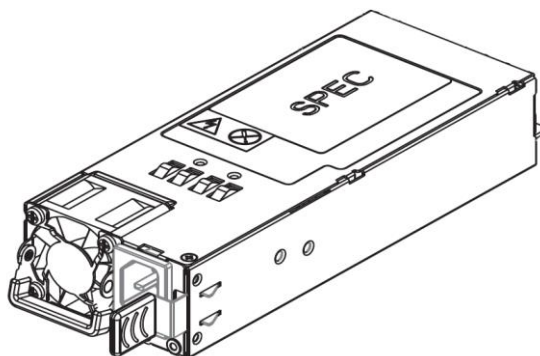
Port mode	Specification
RJ-45 port	10/100/1000Mbps auto negotiation MDI/MDI-X cable mode auto negotiation
QSFP28	100GBASE-CR4 transceiver, Copper, 5m 100GBASE-SR4 transceiver, 850nm, MMF, OM3/OM4, 100m

The SSE-C3632S/R provides 32 QSFP28 ports and supports use of a QSFP28 cable. It enhances the flexibility of the network.

## 1.6 Power Supply Module

### 800W Power Module

The Power Supply Module (PSM) of the SSE-C3632S/R is shown in the sketch below:



**Fig 1-6. Sketch of SSE-C3632S/R Power Supply Module**

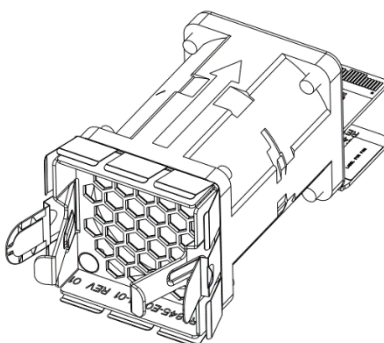
SSE-C3632S and SSE-C3632SR switches have two PSMs for redundancy. There are two airflow options - front to back (SSE-C3632S) and back to front (SSE-C3632SR).

The maximum power is 800W. The input is 100VAC~240VAC and the output is 12V +/- 5%. There is a handle for installing or removing the module on the back of the power supply. The power supply module supports hot plug.

Caution: **Different airflow power modules can not be mixed.**

## 1.7 Fan Module

The fan module of the SSE-C3632S/R is shown in the sketch below:



**Fig 1-7. Fan module**

SSE-C3632S and SSE-C3632SR switches have five fan modules in the standard configuration. The rotation speed of the fan(s) self-adjusts to adapt to the system temperature.

**Caution:** Power Supply Modules must have the same airflow as the fan modules. The fan modules are not field replaceable.

## 1.8 System Specifications

**System Specifications of the SSE-C3632S/R**

Type Attribute	SSE-C3632S/R
Dimension(W * H * D) (mm)	433.8 * 44 * 520
Weight	10.18kg(with 2 PSU)
Fixed Port	32 QSFP28 ports
Management Port	1 RJ-45 serial console port
Power Input	100~240VAC(50~60Hz)
System Consumption	<657W
Operating Temperature (airflow front to back)	0°C~45°C
Operating Temperature (airflow back to front)	0°C~40°C
Storage Temperature	-40°C~75°C
Operating Relative Humidity	10%~90%, non-condensing
Storage Relative Humidity	5%~95%, non-condensing

## Chapter 2. Standardized Warning Statements

### 2.1 About Standardized Warning Statements

The following statements are industry standard warnings, provided to warn the user of situations which have the potential for bodily injury. Should you have questions or experience difficulty, contact Supermicro's Technical Support department for assistance. Only certified technicians should attempt to install or configure components.

Read this appendix in its entirety before installing or configuring components in the Supermicro chassis

These warnings may also be found on our web site at

[http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

#### Warning Definition



#### Warning!

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

警告の定義

この警告サインは危険を意味します。

人身事故につながる可能性がありますので、いずれの機器でも動作させる前に、

**電気回路に含まれる危険性**に注意して、標準的な事故防止策に精通して下さい。

## Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide

此警告符号代表危险。

您正处于可能受到严重伤害的工作环境中。在您使用设备开始工作之前，必须充分意识到触电的危险，并熟练掌握防止事故发生的标准工作程序。请根据每项警告结尾的声明号码找到此设备的安全性警告说明的翻译文本。

此警告符號代表危險。

您正處於可能身體可能會受損傷的工作環境中。在您使用任何設備之前，請注意觸電的危險，並且要熟悉預防事故發生的標準工作程序。請依照每一注意事項後的號碼找到相關的翻譯說明內容。

### **Warnung**

#### **WICHTIGE SICHERHEITSHINWEISE**

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu Verletzungen führen kann. Machen Sie sich vor der Arbeit mit Geräten mit den Gefahren elektrischer Schaltungen und den üblichen Verfahren zur Vorbeugung vor Unfällen vertraut. Suchen Sie mit der am Ende jeder Warnung angegebenen Anweisungsnummer nach der jeweiligen Übersetzung in den übersetzten Sicherheitshinweisen, die zusammen mit diesem Gerät ausgeliefert wurden.

#### **BEWAHREN SIE DIESE HINWEISE GUT AUF.**

#### **INSTRUCCIONES IMPORTANTES DE SEGURIDAD**

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.

#### **GUARDE ESTAS INSTRUCCIONES.**

#### **IMPORTANTES INFORMATIONS DE SÉCURITÉ**

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.

#### **CONSERVEZ CES INFORMATIONS**

## Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide

안전을 위한 주의사항

경고!

이 경고 기호는 위험이 있음을 알려 줍니다. 작업자의 신체에 부상을 야기 할 수 있는 상태에 있게 됩니다. 모든 장비에 대한 작업을 수행하기 전에 전기회로와 관련된 위험요소들을 확인하시고 사전에 사고를 방지할 수 있도록 표준 작업절차를 준수해 주시기 바랍니다.

해당 번역문을 찾기 위해 각 경고의 마지막 부분에 제공된 경고문 번호를 참조하십시오

### **BELANGRIJKE VEILIGHEIDSINSTRUCTIES**

Dit waarschuwings symbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij een elektrische installatie betrokken risico's en dient u op de hoogte te zijn van de standaard procedures om ongelukken te voorkomen. Gebruik de nummers aan het eind van elke waarschuwing om deze te herleiden naar de desbetreffende locatie.

### **BEWAAR DEZE INSTRUCTIES**

#### **INSTRUCCIONES IMPORTANTES DE SEGURIDAD**

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.

#### **GUARDE ESTAS INSTRUCCIONES.**

#### **IMPORTANTES INFORMATIONS DE SÉCURITÉ**

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.

#### **CONSERVEZ CES INFORMATIONS**

안전을 위한 주의사항

경고!

이 경고 기호는 위험이 있음을 알려 줍니다. 작업자의 신체에 부상을 야기 할 수 있는 상태에 있게 됩니다. 모든 장비에 대한 작업을 수행하기 전에 전기회로와 관련된 위험요소들을 확인하시고 사전에 사고를 방지할 수 있도록 표준 작업절차를 준수해 주시기 바랍니다.

해당 번역문을 찾기 위해 각 경고의 마지막 부분에 제공된 경고문 번호를 참조하십시오

## **BELANGRIJKE VEILIGHEIDSINSTRUCTIES**

Dit waarschuwings symbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij een elektrische installatie betrokken risico's en dient u op de hoogte te zijn van de standaard procedures om ongelukken te voorkomen. Gebruik de nummers aan het eind van elke waarschuwing om deze te herleiden naar de desbetreffende locatie.

## **BEWAAR DEZE INSTRUCTIES**

### **Installation Instructions**



#### **Warning!**

Read the installation instructions before connecting the system to the power source.

設置手順書

システムを電源に接続する前に、設置手順書をお読み下さい。

#### **警告**

将此系统连接电源前, 请先阅读安装说明。

#### **警告**

將系統與電源連接前，請先閱讀安裝說明。

#### **Warnung**

Vor dem Anschließen des Systems an die Stromquelle die Installationsanweisungen lesen.

#### **¡Advertencia!**

Lea las instrucciones de instalación antes de conectar el sistema a la red de alimentación.

#### **Attention**

Avant de brancher le système sur la source d'alimentation, consulter les directives d'installation.

시스템을 전원 에 연결하기 전에 설치 안내를 읽어주십시오.

#### **Waarschuwing**

Raadpleeg de installatie-instructies voordat u het systeem op de voedingsbron aansluit.

### **Circuit Breaker**



#### **Warning!**

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 250 V, 20 A

サーキット・ブレーカー

この製品は、短絡（過電流）保護装置がある建物での設置を前提としています。



## **Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide**

保護装置の定格が 250 V、20 A を超えないことを確認下さい。

### **警告**

此产品的短路(过载电流)保护由建筑物的供电系统提供,确保短路保护设备的额定电流不大于 250V,20A。

### **警告**

此產品的短路(過載電流)保護由建築物的供電系統提供,確保短路保護設備的額定電流不大於 250V,20A。

### **Warnung**

Dieses Produkt ist darauf angewiesen, dass im Gebäude ein Kurzschluss- bzw. Überstromschutz installiert ist. Stellen Sie sicher, dass der Nennwert der Schutzvorrichtung nicht mehr als: 250 V, 20 A beträgt.

### **¡Advertencia!**

Este equipo utiliza el sistema de protección contra cortocircuitos (o sobrecorrientes) del edificio. Asegúrese de que el dispositivo de protección no sea superior a: 250 V, 20 A.

### **Attention**

Pour ce qui est de la protection contre les courts-circuits (surtension), ce produit dépend de l'installation électrique du local. Vérifiez que le courant nominal du dispositif de protection n'est pas supérieur à :250 V, 20 A.

### **경고!**

이 제품은 전원의 단락(과전류)방지에 대해서 전적으로 건물의 관련 설비에 의존합니다.

보호장치의 정격이 반드시 250V(볼트), 20A(암페어)를 초과하지 않도록 해야 합니다.

### **Waarschuwing**

Dit product is afhankelijk van de kortsluitbeveiliging (overspanning) van uw elektrische installatie. Controleer of het beveiligde apparaat niet groter gedimensioneerd is dan 220V, 20A.

## **Power Disconnection Warning**



### **Warning!**

The system must be disconnected from all sources of power and the power cord removed from the power supply module(s) before accessing the chassis interior to install or remove system components.

### **電源切断の警告**

システムコンポーネントの取り付けまたは取り外しのために、シャーシ内部にアクセスするには、

## **Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide**

システムの電源はすべてのソースから切断され、電源コードは電源モジュールから取り外す必要があります。

### **警告**

在你打开机箱并安装或移除内部器件前,必须将系统完全断电,并移除电源线。

### **警告**

在您打開機殼安裝或移除內部元件前，必須將系統完全斷電，並移除電源線。

### **Warnung**

Das System muss von allen Quellen der Energie und vom Netzanschlusskabel getrennt sein, das von den Spg.Versorgungsteilmodulen entfernt wird, bevor es auf den Chassisinnenraum zurückgreift, um Systemsbestandteile anzubringen oder zu entfernen.

### **¡Advertencia!**

El sistema debe ser disconnected de todas las fuentes de energía y del cable eléctrico quitado de los módulos de fuente de alimentación antes de tener acceso el interior del chasis para instalar o para quitar componentes de sistema.

### **Attention**

Le système doit être débranché de toutes les sources de puissance ainsi que de son cordon d'alimentation secteur avant d'accéder à l'intérieur du chasis pour installer ou enlever des composants de système.

### **경고!**

시스템에 부품들을 장착하거나 제거하기 위해서는 새시 내부에 접근하기 전에 반드시 전원

공급장치로부터 연결되어있는 모든 전원과 전기코드를 분리해주어야 합니다.

### **Waarschuwing**

Voordat u toegang neemt tot het binnenwerk van de behuizing voor het installeren of verwijderen van systeem onderdelen, dient u alle spanningsbronnen en alle stroomkabels aangesloten op de voeding(en) van de behuizing te verwijderen.

## Equipment Installation



### Warning!

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

機器の設置

トレーニングを受け認定された人だけがこの装置の設置、交換、またはサービスを許可されていま  
す。

### 警告

只有经过培训且具有资格的人员才能进行此设备的安装、更换和维修。

### 警告

只有經過受訓且具資格人員才可安裝、更換與維修此設備。

### Warnung

Das Installieren, Ersetzen oder Bedienen dieser Ausrüstung sollte nur geschultem, qualifiziertem Personal gestattet werden.

### ¡Advertencia!

Solamente el personal calificado debe instalar, reemplazar o utilizar este equipo.

### Attention

Il est vivement recommandé de confier l'installation, le remplacement et la maintenance de ces équipements à des personnels qualifiés et expérimentés.

### 경고!

훈련을 받고 공인된 기술자만이 이 장비의 설치, 교체 또는 서비스를 수행할 수 있습니다.

### Waarschuwing

Deze apparatuur mag alleen worden geïnstalleerd, vervangen of hersteld door geschoold en gekwalificeerd personeel.

## Restricted Area



### Warning!

This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security. (This warning does not apply to workstations).

アクセス制限区域

このユニットは、アクセス制限区域に設置されることを想定しています。

アクセス制限区域は、特別なツール、鍵と錠前、その他のセキュリティの手段を用いてのみ出入りが  
可能です。

## Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide

### 警告

此部件应安装在限制进出的场所，限制进出的场所指只能通过使用特殊工具、锁和钥匙或其它安全手段进出的场所。

### 警告

此裝置僅限安裝於進出管制區域，進出管制區域係指僅能以特殊工具、鎖頭及鑰匙或其他安全方式才能進入的區域。

### Warnung

Diese Einheit ist zur Installation in Bereichen mit beschränktem Zutritt vorgesehen. Der Zutritt zu derartigen Bereichen ist nur mit einem Spezialwerkzeug, Schloss und Schlüssel oder einer sonstigen Sicherheitsvorkehrung möglich.

### ¡Advertencia!

Esta unidad ha sido diseñada para instalación en áreas de acceso restringido. Sólo puede obtenerse acceso a una de estas áreas mediante la utilización de una herramienta especial, cerradura con llave u otro medio de seguridad.

### Attention

Cet appareil doit être installée dans des zones d'accès réservés. L'accès à une zone d'accès réservé n'est possible qu'en utilisant un outil spécial, un mécanisme de verrouillage et une clé, ou tout autre moyen de sécurité.

### 경고!

이 장치는 접근이 제한된 구역에 설치하도록 되어있습니다. 특수도구, 잠금 장치 및 키, 또는 기타 보안 수단을 통해서만 접근 제한 구역에 들어갈 수 있습니다.

### Waarschuwing

Dit apparaat is bedoeld voor installatie in gebieden met een beperkte toegang. Toegang tot dergelijke gebieden kunnen alleen verkregen worden door gebruik te maken van speciaal gereedschap, slot en sleutel of andere veiligheidsmaatregelen.

## Battery Handling



### Warning!

There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

電池の取り扱い

電池交換が正しく行われなかった場合、破裂の危険性があります。交換する電池はメーカーが推奨

する型、または同等のものを使用下さい。使用済電池は製造元の指示に従って処分して下さい。

### 警告

電池更換不當會有爆炸危險。請只使用同類電池或製造商推薦的功能相當的電池更換原有電池。請按製造商的說明處理廢舊電池。

## Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide

### 警告

電池更換不當會有爆炸危險。請使用製造商建議之相同或功能相當的電池更換原有電池。請按照製造商的說明指示處理廢棄舊電池。

### Warnung

Bei Einsetzen einer falschen Batterie besteht Explosionsgefahr. Ersetzen Sie die Batterie nur durch den gleichen oder vom Hersteller empfohlenen Batterietyp. Entsorgen Sie die benutzten Batterien nach den Anweisungen des Herstellers.

### Attention

Danger d'explosion si la pile n'est pas remplacée correctement. Ne la remplacer que par une pile de type semblable ou équivalent, recommandée par le fabricant. Jeter les piles usagées conformément aux instructions du fabricant.

### ¡Advertencia!

Existe peligro de explosión si la batería se reemplaza de manera incorrecta. Reemplazar la batería exclusivamente con el mismo tipo o el equivalente recomendado por el fabricante. Desechar las baterías gastadas según las instrucciones del fabricante.

### 경고!

배터리가 올바르게 교체되지 않으면 폭발의 위험이 있습니다. 기존 배터리와 동일하거나 제조사에서 권장하는 동등한 종류의 배터리로만 교체해야 합니다. 제조사의 안내에 따라 사용된 배터리를 처리하여 주십시오.

### Waarschuwing

Er is ontploffingsgevaar indien de batterij verkeerd vervangen wordt. Vervang de batterij slechts met hetzelfde of een equivalent type die door de fabrikant aanbevolen wordt. Gebruikte batterijen dienen overeenkomstig fabrieksvoorschriften afgevoerd te worden.

## Comply with Local and National Electrical Codes



### Warning!

Installation of the equipment must comply with local and national electrical codes.

地方および国の電気規格に準拠

機器の取り付けはその地方および国の電気規格に準拠する必要があります。

### 警告

设备安装必须符合本地与本国电气法规。

### 警告

設備安裝必須符合本地與本國電氣法規。

### Warnung

Die Installation der Geräte muss den Sicherheitsstandards entsprechen.

### ¡Advertencia!

La instalacion del equipo debe cumplir con las normas de electricidad locales y nacionales.

## Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide

### Attention

L'équipement doit être installé conformément aux normes électriques nationales et locales.

경고!

현 지역 및 국가의 전기 규정에 따라 장비를 설치해야 합니다.

### Waarschuwing

Bij installatie van de apparatuur moet worden voldaan aan de lokale en nationale elektriciteitsvoorschriften.

## Product Disposal



### Warning!

Ultimate disposal of this product should be handled according to all national laws and regulations.

製品の廃棄

この製品を廃棄処分する場合、国の関係する全ての法律・条例に従い処理する必要があります。

### 警告

本产品的废弃处理应根据所有国家的法律和规章进行。

### 警告

本產品的廢棄處理應根據所有國家的法律和規章進行。

### Warnung

Die Entsorgung dieses Produkts sollte gemäß allen Bestimmungen und Gesetzen des Landes erfolgen.

### ¡Advertencia!

Al deshacerse por completo de este producto debe seguir todas las leyes y reglamentos nacionales.

### Attention

La mise au rebut ou le recyclage de ce produit sont généralement soumis à des lois et/ou directives de respect de l'environnement. Renseignez-vous auprès de l'organisme compétent.

경고!

이 제품은 해당 국가의 관련 법규 및 규정에 따라 폐기되어야 합니다.

### Waarschuwing

De uiteindelijke verwijdering van dit product dient te geschieden in overeenstemming met alle nationale wetten en reglementen.

## Power Cable and AC Adapter



### Warning!

## **Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide**

When installing the product, use the provided or designated connection cables, power cables and AC adaptors. Using any other cables and adaptors could cause a malfunction or a fire. Electrical Appliance and Material Safety Law prohibits the use of UL or CSA -certified cables (that have UL/CSA shown on the code) for any other electrical devices than products designated by Supermicro only.

電源コードと AC アダプター

製品を設置する場合、提供または指定された接続ケーブル、電源コードと AC アダプターを使用下さい。他のケーブルやアダプタを使用すると故障や火災の原因になることがあります。電気用品安全法は、UL または CSA 認定のケーブル(UL/CSE マークがコードに表記)を Supermicro が指定する製品以外に使用することを禁止しています。

### **警告**

安裝此產品時,請使用本身提供的或指定的連接線,電源線和電源適配器.使用其它線材或適配器可能會引起故障或火災。除了 Supermicro 所指定的產品,電氣用品和材料安全法律規定禁止使用未經 UL 或 CSA 認證的線材。(線材上會顯示 UL/CSA 符號)。

### **警告**

安裝此產品時,請使用本身提供的或指定的連接線,電源線和電源適配器.使用其它線材或適配器可能會引起故障或火災。除了 Supermicro 所指定的產品,電氣用品和材料安全法律規定禁止使用未經 UL 或 CSA 認證的線材。(線材上會顯示 UL/CSA 符號)。

## **Supermicro SSE-C3632S/SSE-C3632SR Switch Installation Guide**

### **Warnung**

Bei der Installation des Produkts, die zur Verfügung gestellten oder benannt Anschlusskabel, Stromkabel und Netzteile. Verwendung anderer Kabel und Adapter kann zu einer Fehlfunktion oder ein Brand entstehen. Elektrische Geräte und Material Safety Law verbietet die Verwendung von UL- oder CSA-zertifizierte Kabel, UL oder CSA auf der Code für alle anderen elektrischen Geräte als Produkte von Supermicro nur bezeichnet gezeigt haben.

### **¡Advertencia!**

Al instalar el producto, utilice los cables de conexión previstos o designados, los cables y adaptadores de CA. La utilización de otros cables y adaptadores podría ocasionar un mal funcionamiento o un incendio. Aparatos Eléctricos y la Ley de Seguridad del Material prohíbe el uso de UL o CSA cables certificados que tienen UL o CSA se muestra en el código de otros dispositivos eléctricos que los productos designados por Supermicro solamente.

### **Attention**

Lors de l'installation du produit, utilisez les bables de connection fournis ou désigné. L'utilisation d'autres cables et adaptateurs peut provoquer un dysfonctionnement ou un incendie. Appareils électroménagers et de loi sur la sécurité Matériel interdit l'utilisation de UL ou CSA câbles certifiés qui ont UL ou CSA indiqué sur le code pour tous les autres appareils électriques que les produits désignés par Supermicro seulement.

### **경고!**

제품을 설치할 때에는 제공되거나 지정된 연결케이블과 전원케이블, AC 어댑터를 사용해야 합니다. 그 밖의 다른 케이블들이나 어댑터들은 고장 또는 화재의 원인이 될 수 있습니다. 전기용품안전법 (Electrical Appliance and Material Safety Law)은 슈퍼마이크로에서 지정한 제품들 외에는 그 밖의 다른 전기 장치들을 위한 UL 또는 CSA 에서 인증한 케이블(전선 위에 UL/CSA 가 표시)들의 사용을 금지합니다.

### **Waarschuwing**

Bij het installeren van het product, gebruik de meegeleverde of aangewezen kabels, stroomkabels en adapters. Het gebruik van andere kabels en adapters kan leiden tot een storing of een brand. Elektrisch apparaat en veiligheidsinformatiebladen wet verbiedt het gebruik van UL of CSA gecertificeerde kabels die UL of CSA die op de code voor andere elektrische apparaten dan de producten die door Supermicro alleen.

使用者：這是甲類資訊產品,在居住的環境中使用時,可能會造成射頻干擾.在這種情況下,使用者會被要求採取某些適當對策.



## Chapter 3. Installation Notices

To ensure the proper operation of the SSE-C3632S/R and your physical security, please read carefully the following installation guide.

### 3.1 Environmental Requirements

- The switch must be installed in a clean area. Otherwise, the switch may be damaged by electrostatic adherence.
- Maintain the temperature @airflow front to back within the range of 0 to 45 °C, temperature @airflow back to front with 0 to 40°C, Ensure that humidity is within the range of 10% to 90%, non-condensing.
- The switch must be placed in a dry and cool place. Leave sufficient spacing around the switch for good air circulation.
- AC power input to the switch must be in the range of: 100 ~ 240VAC (50/60Hz).
- The switch must be well grounded in order to avoid ESD damage and physical injury of people.
- Avoid exposing the switch to direct sunlight. Keep the switch away from heat sources and strong electromagnetic interference sources.
- The switch must be mounted in a standard 19" rack or placed on a clean level desktop.

### Dust and Particles

Dust is harmful to the safe operation of SSE-C3632S/R switches. 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 reduced product lifespan, but also an increased chance of communication failures. The recommended value for dust content and particle diameter in the site is shown below:

**Environmental Requirements: Dust**

Max Diameter (µm)	0.5	1	3	5
Max Density (particles/m <sup>3</sup> )	1.4×10 <sup>5</sup>	7×10 <sup>5</sup>	2.4×10 <sup>5</sup>	1.3×10 <sup>5</sup>

In addition, salt, acid and sulfide in the air are harmful to the switch. Such harmful gases will aggravate metal corrosion and the aging of some parts. The site should avoid harmful gases, such as SO<sub>2</sub>, H<sub>2</sub>S, NO<sub>2</sub>, NH<sub>3</sub> and Cl<sub>2</sub>, etc. The table below details the relevant threshold values.

**Environmental Requirements: Particles**

Gas	Average (mg/m <sup>3</sup> )	Max (mg/m <sup>3</sup> )
SO <sub>2</sub>	0.2	1.5
H <sub>2</sub> S	0.006	0.03
NO <sub>2</sub>	0.04	0.15
NH <sub>3</sub>	0.05	0.15
Cl <sub>2</sub>	0.01	0.3

**Temperature and Humidity**

Although the switch is designed to use 5 fans, the site should still maintain a desirable temperature and humidity. High-humidity conditions can cause electrical resistance degradation or even electric leakage, 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 switch’s working lifespan. In the hot summer, it is recommended to use air-conditioners to cool down the site. And in cold weather, use of heaters is recommended.

The recommended temperature and humidity are shown below:

**Environmental Requirements: Temperature and Humidity**

Temperature (airflow front to back):		Relative humidity	
Long term condition	Short term condition	Long term condition	Short term condition
15 ~ 35°C	0 ~ 45°C	40 ~ 65%	10 ~ 90%

Temperature (airflow back to front):		Relative humidity	
Long term condition	Short term condition	Long term condition	Short term condition
15 ~ 30°C	0 ~ 40°C	40 ~ 65%	10 ~ 90%

**Caution:** A sample of ambient temperature and humidity should be taken at 1.5m above the floor and 0.4m in front of the switch rack, with no protective panel covering the front and rear 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. Excessive operating conditions refers to ambient temperature and relative humidity values that may occur during an air-conditioning system failure - normal operation conditions should be recovered within 5 hours.

## Power Supply

Before powering on the power supply, please check the power input to ensure proper grounding of the power supply system. The input source for the switch should be reliable and secure; a voltage adaptor 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, 5A. It is recommended to use a UPS for more reliable power supply.

### Cautions:

1. Improper power supply system grounding, extreme fluctuation of the input source, and transients (or spikes) can result in larger error rate, or even hardware damage!
2. Disconnect power supply cords before servicing!

## Preventing Electrostatic Discharge Damage

Static electric discharges can cause damage to internal circuits, even the entire switch. Follow these guidelines for avoiding ESD damage:

- 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 device/system 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 should be noted:

- Precautions should be taken to prevent power source interruptions;
- Provide the system with a dedicated ground, rather than sharing the grounding with other 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 SSE-C3632S/R is designed to be mounted on a standard 19" rack. Please ensure good ventilation for the rack.

- Every device in the rack will generate heat during operation, therefore vent and fans must be provided for an enclosed rack, and devices should not be stacked closely.
- 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 the aforementioned.

**Caution:** If a standard 19" rack is not available, the SSE-C3632S/R can be placed on a clean level desktop. Leave a clearance of 100mm around the switch for ventilation, and do not place anything on top of the switch.

## 3.2 Installation Notice

- Read through the installation instruction carefully before operating on the system. 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 should use the proper tools to perform the installation. Users should always wear antistatic uniform and ESD wrist straps. Users should use standard cables and connectors.
- After the installation, users should clean the site. Before powering on the switch, users should ensure the switch is well grounded. Users should maintain the switch regularly to extend the lifespan of the switch.
- A statement indicating the location of a readily accessible disconnect device shall be incorporated in the building installation wiring.

### 3.3 Security Warnings

- When using a QSFP 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. It can cause short-circuit.
- Do not touch the power plug and power socket.
- Do not place flammable materials near the switch.
- Do not configure the switch alone in a dangerous situation,
- Use standard power sockets which have overload and leakage protection.
- Inspect and maintain the site and the switch regularly.
- Have the emergence power switch on the site. In case of emergence, switch off the power immediately.

**Caution:** Potential risks include: Electric Leakage, Power Supply Arcing, Power Line Breakage, Faulty Ground, Circuit Overload and Electrical Short Circuit. If an electric shock, fire, or electrical short circuit occurs, please cut off the electricity supply and raise an alarm. Rescue any injured person, give the injured person proper first aid treatment according to the injury, and seek help from the Medical Emergency personnel.

# Chapter 4. Device Installation

## 4.1 Installation Preparation

### Verify the Package Contents

Please unpack the shipping package and verify carefully the contents inside.

### Required Tools and Utilities

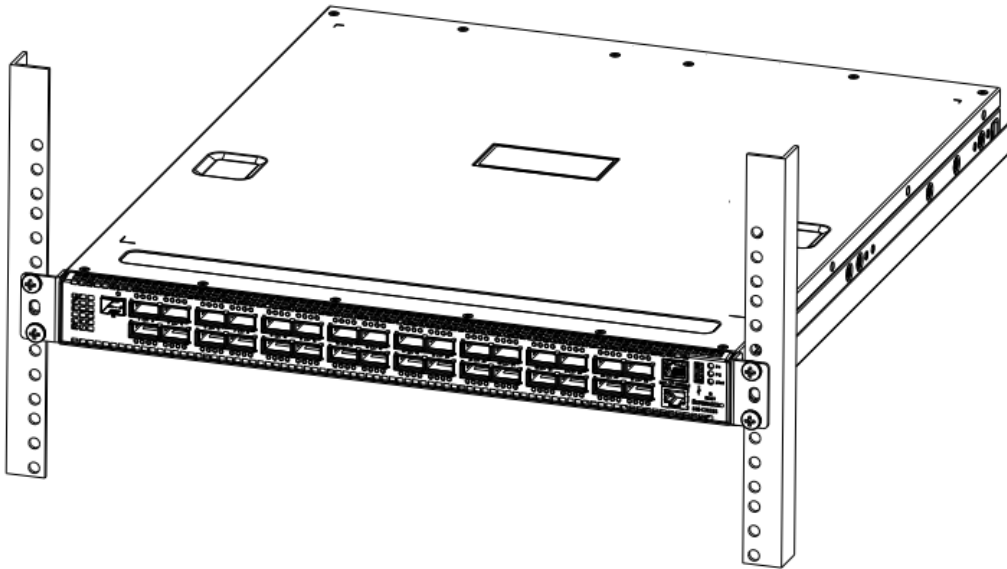
The required tools and utilities are shown below:

- Cross screwdrivers
- Flat-blade screwdriver
- ESD wrist strap
- Antistatic uniform

**Caution:** Users should prepare the required tools and utilities by themselves.

## 4.2 Device Installation

### Installing the Switch



**Figure 4-1. Switch Installed in a Rack**

Please mount the SSE-C3632S/R on the 19" rack as follows:

1. Attach the two brackets on the SSE-C3632S/R with screws provided in the accessory kit.
2. Provide additional support (such as the rack shelf) for the switch when installing because the machine is fairly heavy.
3. Put the bracket-mounted switch smoothly into a standard 19" rack. Fasten the SSE-C3632S/R to the rack with the screws provided. Leave enough space around the switch for good air circulation.

**Caution:** Do not place anything on top of the switch. The brackets are used to fix the switch on the rack. They are not intended to be load bearing.

Do not block the vent holes on the switch to ensure proper operation.

## Installation with Mounting Rails

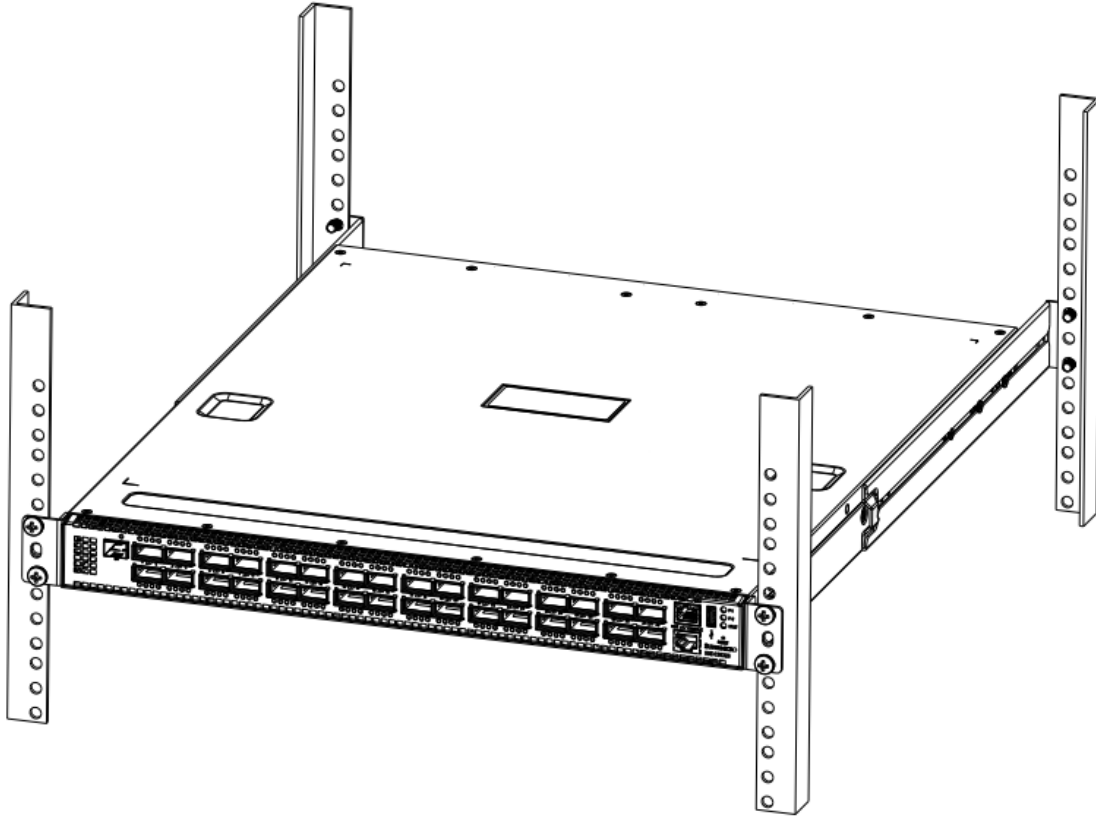
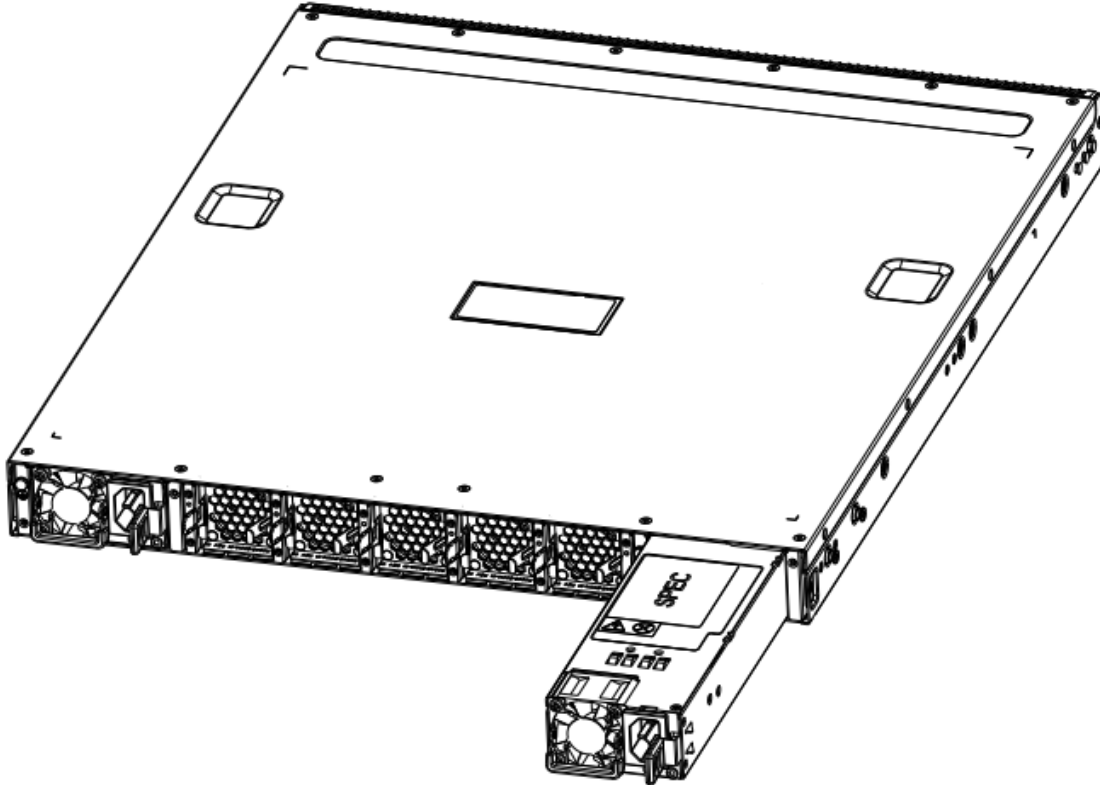


Figure 44-2 Switches Installed Using Front and Rear Mounting Rails



## Installing the Power Supply Module

The SSE-C3632S and SSE-C3632SR switches support two power supplies.



**Figure 44-2 Switch Power Supply Installation**

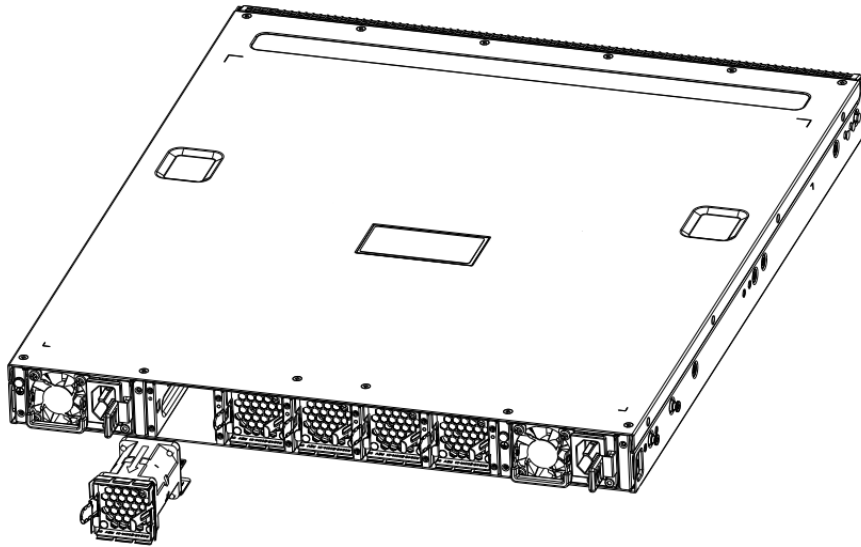
Please install the power supply module as follows:

1. Insert the power supply into the opening as shown.
2. The golden finger of the power supply should be inserted end-downwards. Once secure, you can hear the lock sound "click".
3. Force the lock on the side of the AC cable socket in the direction of the fan when removing the power supply module. Then you can easily withdraw the power supply.

**Note:** The power supply has its own cooling fan. It is important to use the correct power supply module to ensure proper cooling of the switch.

## Installing the Fan

The SSE-C3632S and SSE-C3632SR switches have five fans in the standard configuration.



**Figure 44-5 Fan installation in SSE-C3632S/R switches**

Please install or remove the fan module as follows:

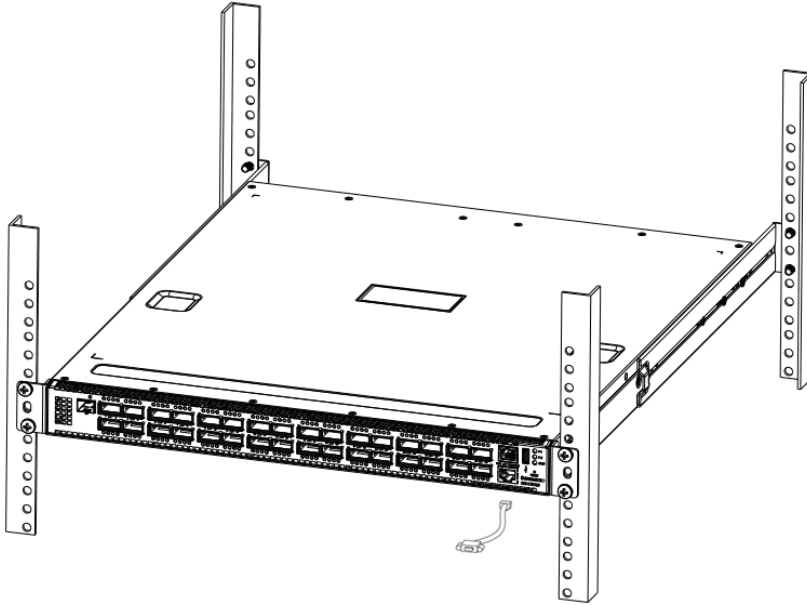
1. The golden fingers should be positioned inward and on the back of the switch. After proper insertion you can hear the lock sound of “click”.
2. To withdraw a fan, pinch the sheet metal inward – then the fan module can be pulled out.

**Caution:** The sheet metal edge of fan is thin, please watch your fingers you when pinch, press, insert and pull it.

**WARNING! - Hazardous moving parts. Keep away from moving fan blades.**

## Connecting the Console

The SSE-C3632S/R has a serial console port.



**Figure 44-6 Connecting Console to a SSE-C3632S/R Switch**

The connection procedure is as follows:

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).
3. Power on the switch and the character terminal. Configure the switch through the character terminal.

## QSFP28 Transceiver Installation

The SSE-C3632S/R provides 32 QSFP28 ports. The procedure for installing a QSFP28 transceiver is shown below:

1. Put on an ESD wrist strap (or antistatic gloves).
2. Insert the QSFP28 transceiver to the guide rail inside the QSFP28 port. Do not insert the QSFP28 transceiver up-side-down.
3. Push the QSFP28 transceiver along the guide rail gently until you feel the transceiver snap into place at the bottom of the QSFP28 port.

**Note:** The QSFP28 transceiver is hot swappable.

**Caution:** Do not stare directly at the 2 fiber bore in the QSFP transceiver when the switch is in operation, otherwise the laser may damage your eyes.

## Copper Cable/Fiber Cable Connection

Copper cables should be connected as below:

1. Insert one end of the Ethernet cable to the RJ-45 Ethernet port in the switch copper port.
2. Insert the other end of the Ethernet cable to the RJ-45 Ethernet port of other device.

Check all status indicators for the corresponding ports; a lighted LED indicates that the link has been established, otherwise the link is not ready and the cable should be examined.

**Caution:** Please verify the label above the port to ensure you are using the right port. Connecting to wrong ports might damage the switch.

Fiber cables should be connected as described below.

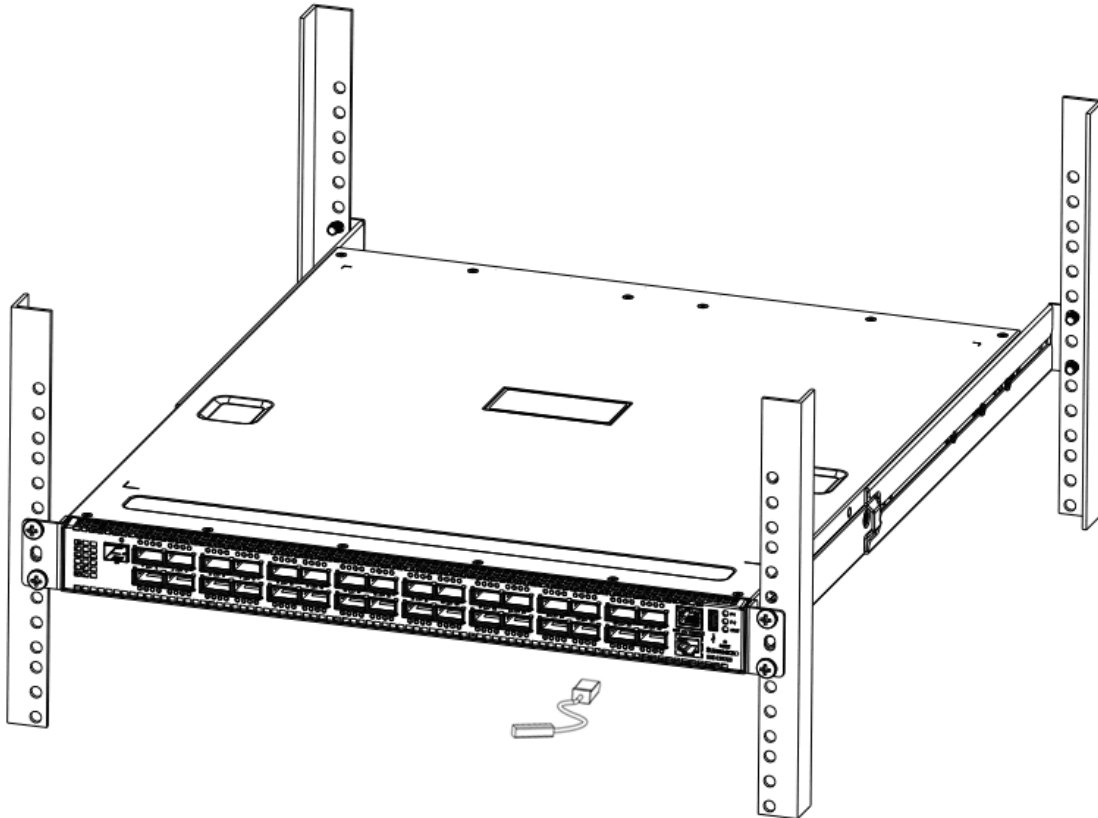
1: Remove the protective plug from the QSFP28 fiber transceiver bore; Remove the protective cap from one end of the fiber cable. Keep the fiber end clean and neat.

2: Attach one end of the fiber cable to the QSFP28 transceiver, and attach the other end to the transceiver of the corresponding devices.

**Note:** The QSFP28 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 lighted LED indicates that the link has been established; otherwise the link is not ready and should be examined.

**Caution:** Please verify the label above the port to ensure you are using the correct port. Connecting to 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. Do not stare at the fiber bore when the switch is in operation. That may damage your eyes.



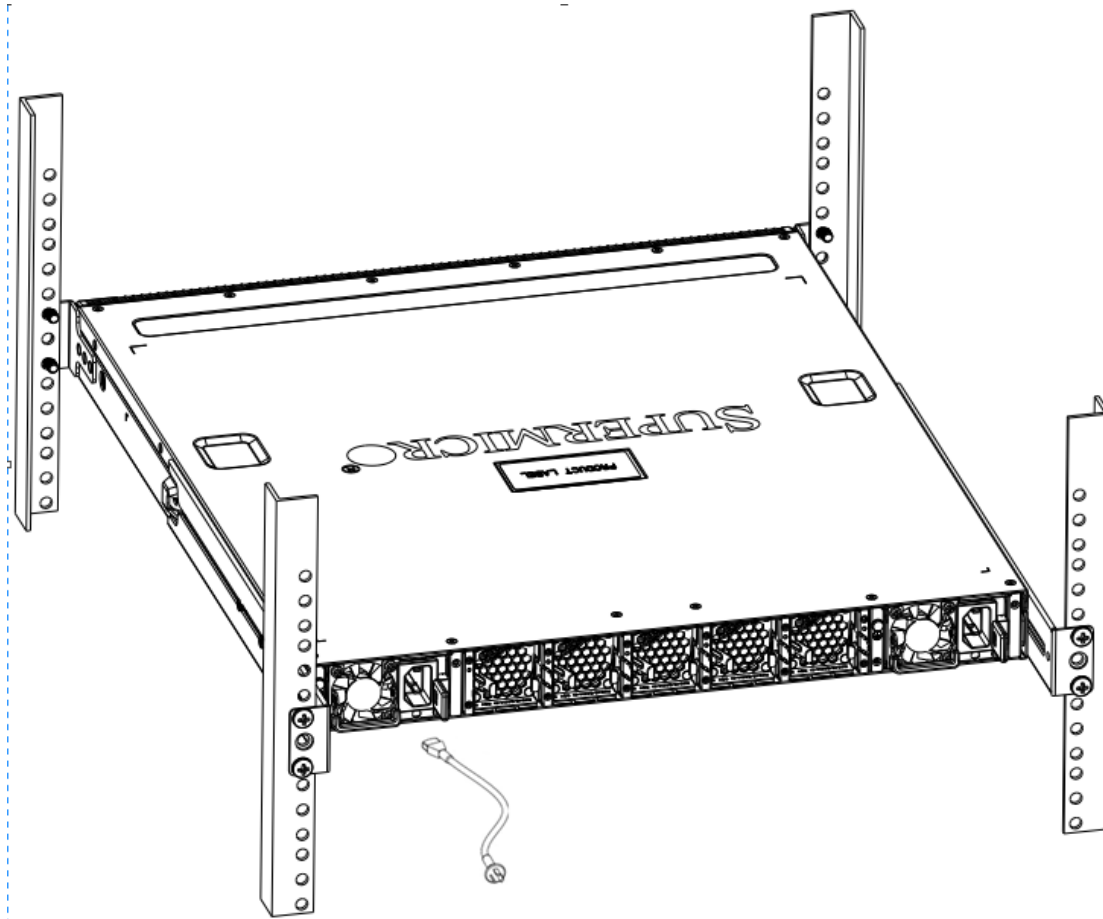
**Figure 44-7 Connect the DAC Cable to the Switches**

The connection approach of DAC cable is below:

1. Connect the end of the DAC cable to into the QSFP28 port of the SSE-C3632S/R switch.
2. Check the indicator light state of the light port. If the LINK light is bright, it means the link is connected. If LINK light is out, it means the lines have a fault - please check the line connection.

## AC Power Supply Connection

SSE-C3632S/R uses 220/110VAC power supply by default. Please read the power input specification for detailed information.



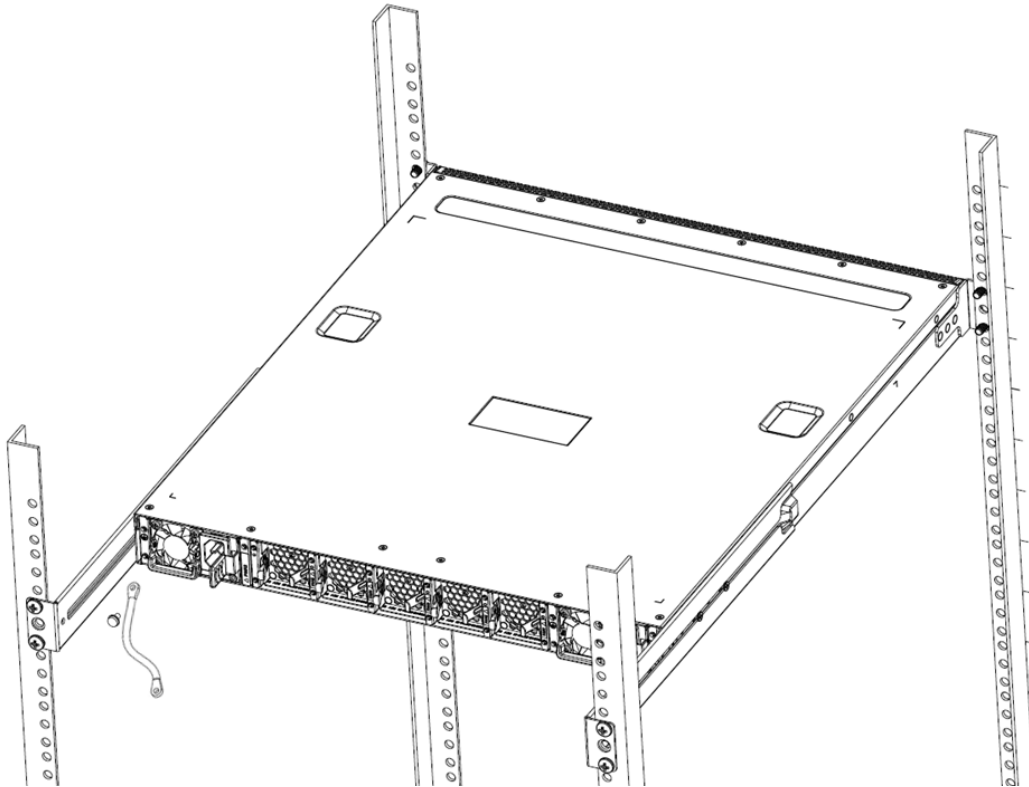
**Figure 44-8. Connecting the Power Supply Cable to the Switch**

The AC Power supply connection procedure is described as follows:

1. Insert one end of the power cable provided in the accessory kit into power source socket, and the other end to the power socket (with overload and leakage protection).
2. Check the power status indicator in the front panel of the switch. The corresponding PWR indicator should light. SSE-C3632S/R is self-adjusts to 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.

**Caution:** The input voltage must be within the required range, otherwise the switch can be damaged or malfunction. Do not open the switch shell without permission. It can cause physical injury. Disconnect all power supply cords before servicing.

## Grounding Cable Connection



**Figure 4-3. Connect the Grounding Cable to the Switches**

Please connect the grounding cable as follows:

1. Cover one side of the grounding cable to the grounding pillar of the back panel.
2. Take the grounding screw from the accessory bag, insert and screw down to the fixed nut on the grounding pillar of the switch,
3. Connect the other side of the grounding cable to the grounding side of the switch.

**Caution:** The unit should be permanently connected to ground.

## Checking the Switch

- Does the power used correspond to the power on the label?
- Is the ground cable connected?
- If there are outside cables, please ensure they are well connected to lightning protection device.



