ES1000 Series Installation Guide

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Revision History

This section lists the summary of changes corresponding to each release.

Release	Date	Change Summary
1.0.0	10/2024	New document
1.1.0	12/2024	Added Revision History

ES1000

This reference document provides important legal disclaimers and notices for ES1000 products.

Disclaimer

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Preface

Document Scope

This installation guide details the design features of, and provides instructions for the ES1000 enterprise access switch.

Intended Audiences

- System architects
- Firmware engineers
- System application engineers

Document Conventions

The following table describes various types of notes used within this installation guide.

Type	Generalized Definition
ⓘ NOTE:	Provides supplemental information.
⚠ CAUTION:	Indicates a situation that if not avoided, may result in equipment damage or minor to moderate injury.
ⓟ TIP:	Indicates information that helps you make better use of your system.
⚠ WARNING:	Indicates a hazardous situation that if not avoided, could result in data loss or serious injury.
ⓘ DANGER:	Indicates a hazardous situation that if not avoided, will result in death or serious injury.

System Specifications

This document describes some of the features and the installation process of the ES1000 enterprise access switch.

Introduction

The ES1000 series comprises of 1U, 19” enterprise access switches with 24 or 48 ports of 1GbE, optional PoE++ 803.3bt Type 4 Class 8, and 4 x 10/25GbE-SFP28 ports, MACsec, and high availability through multiple fans and redundant power supplies.

Key System Specifications

Type	ES1000
Depth	371.7 mm
Height	43.4 mm
Width	438.2 mm
Weight	7.6+/-0.3 Kg (with 2 PSU)
Power Input (VAC)	100 ~ 240 VAC (50-60Hz)
Power Consumption (W)	ES1000-24P, ES1000-48P, ES1000-48CP: <3200W, ES1000-24, ES1000-48, ES1000-48C: <550W
Operating Temperature (airflow front to back)	0º - 45º C
Operating Relative Humidity	5% - 85% non-condensing
Storage Temperature	-40º - 70º C
Storage Relative Humidity	5% - 95%

Table of Attributes

SKU ID	1GbE ports	POE++	CPU type	Memory	SSD	PSU	Airflow[1]
ES1000-24	24	No	int. ARM dual core	8GB	32GB	2 x 550W	F2B B2F
ES1000-24P	24	POE++	int. ARM dual core	8GB	32GB	2 X 920W	F2B B2F
ES1000-48	48	No	int. ARM dual core	8GB	32GB	2 x 550W	F2B B2F
ES1000-48P	48	POE++	int. ARM dual core	8GB	32GB	2 x 1600W	F2B B2F
ES1000-48C	48	No	X86 quad core	8GB	32GB	2 x 550W	F2B B2F
				16GB	64GB		
ES1000-48CP	48	POE++	X86 quad core	8GB	32GB	2 x 1600W	F2B B2F
				16GB	64GB		

ⓘ NOTE: ES1000-48C and ES1000-48CP support additional option for memory and SSD capacities.

Front Panels

The front panel includes 24/48 network ports and multiple management ports.

Figure 1. Front panel - ES1000-24, ES1000-24P

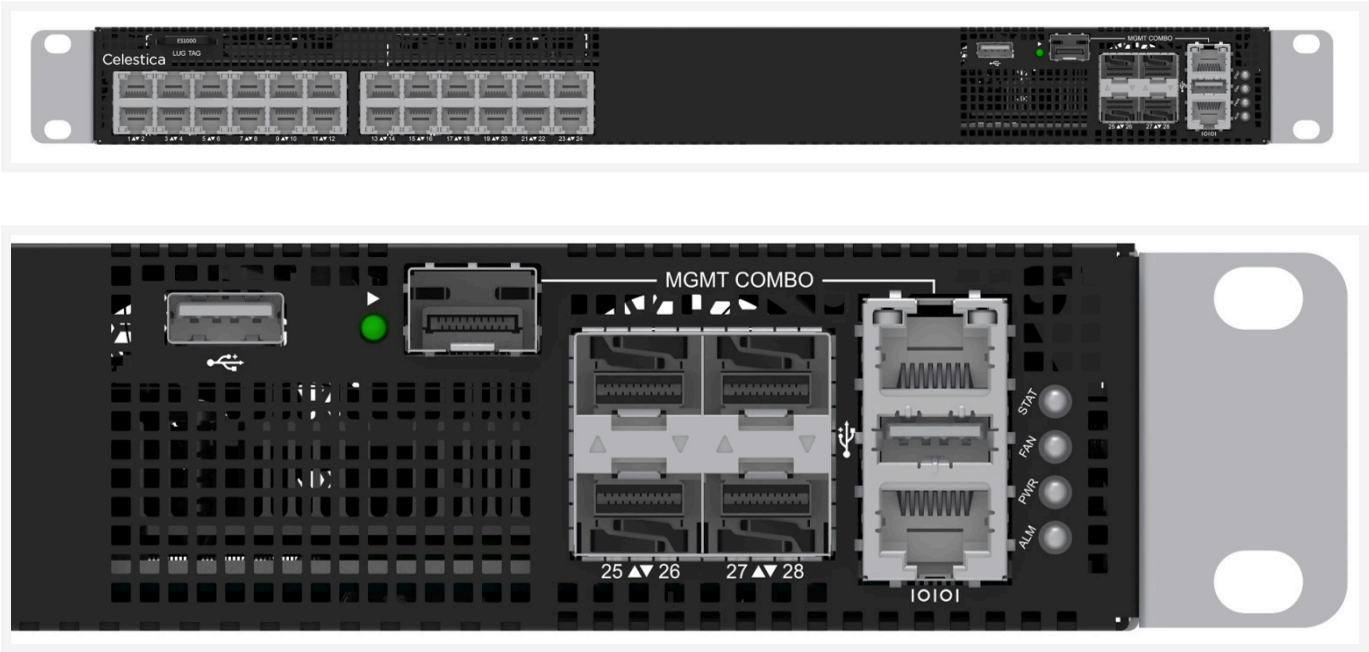
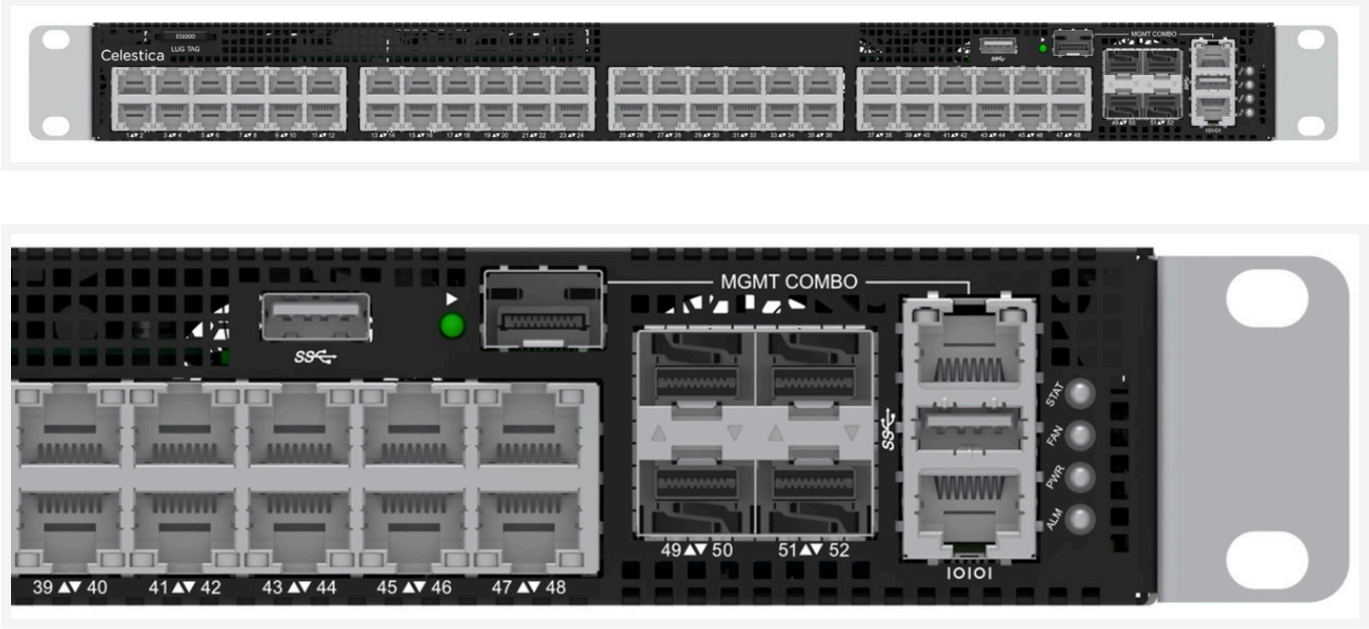


Figure 2. Front panel - ES1000-48, ES1000-48P, ES1000-48C, ES1000-48CP



System Status LEDs

The ES1000 supports the following LEDs.

System Status LEDs	Four bi-colored LEDs on the front of the unit to indicate overall system status (FAN, PSU, ALM, SYS)
RJ45 Network ports	Each port supports two LEDs to indicate link, traffic, PoE status
SFP 28 Uplink ports	Each port supports two bi-colored LEDs to indicate link and traffic status
RJ45 / SFP combo management ports	RJ45 port supports two LEDs to indicate link and traffic status SFP port supports one LED to indicate link and traffic status
PSU	Each PSU has an indication status LED

Figure 3. ES1000-24/24P Front LEDs

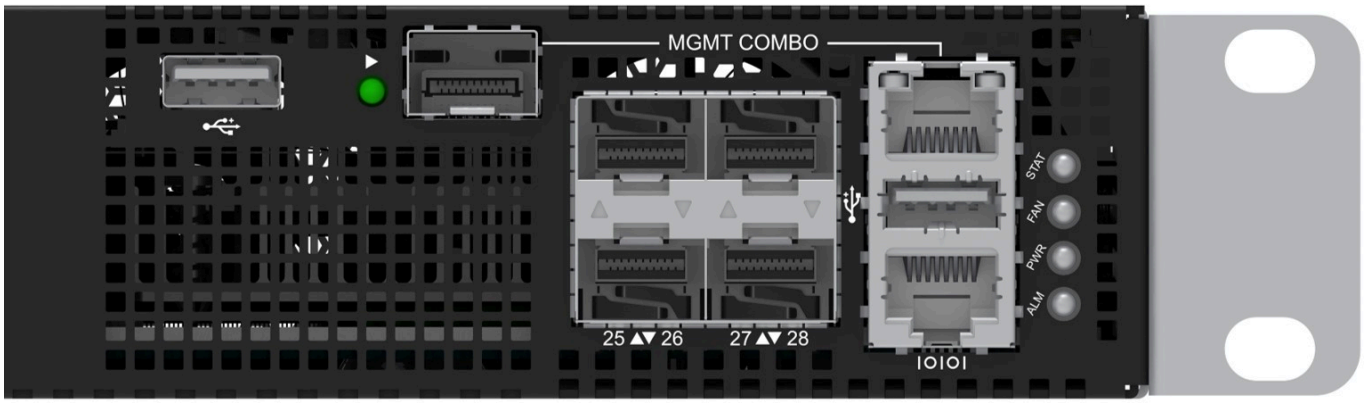
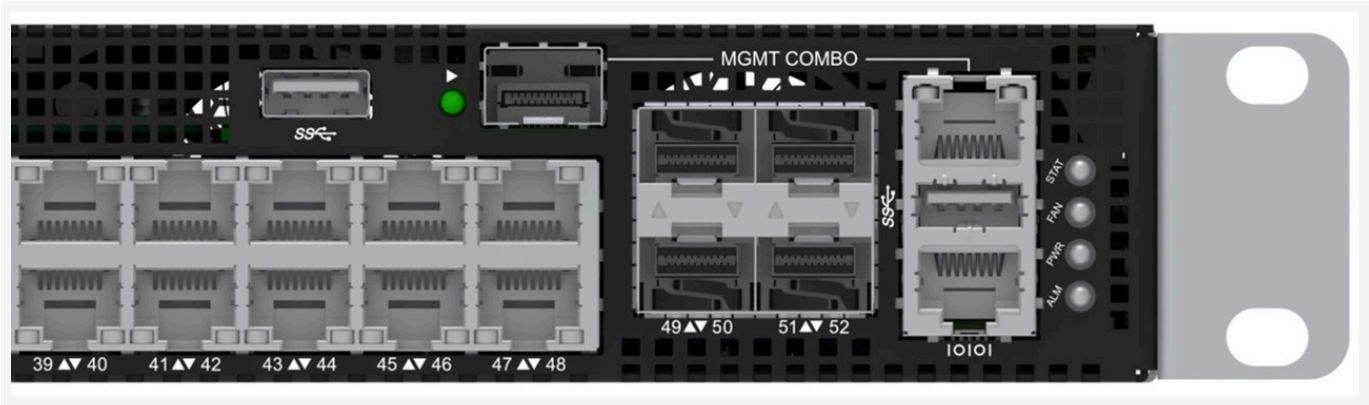


Figure 4. ES1000-48/48P/48C/48CP Front LEDs



System LED Indicator Description

Table of Ports

SKU ID	Port	PoE	SFP28 port	Combo SFP	Combo RJ45	Console port	USB3.0 port	USB2.0 port
ES1000-24	24	No	4	1	1	1		2
ES1000-24P	24	POE++	4	1	1	1		2
ES1000-48	48	No	4	1	1	1		2
ES1000-48P	48	POE++	4	1	1	1		2
ES1000-48C	48	No	4	1	1	1	2	
ES1000-48CP	48	POE++	4	1	1	1	2	

ⓘ NOTE: The USB port(s) do not provide power, only data transmission.

⍰ TIP: Configure the RJ45 serial console port for local or telnet access using asynchronous mode with the following settings: 8 data bits, 1 stop bit, no parity, and a default baud rate of 115200bps.

Port Descriptions

Port type	SKU-ID	Description
Combo[1] RJ45	ES1000-24 ES1000-24P	▪ 10/100/1000Mbps auto negotiation ▪ MDI/MDI-X cable mode auto negotiation
SFP	ES1000-48 ES1000-48P ES1000-48C ES1000-48CP	▪ 1000Mbps auto negotiation
Serial Console port	ES1000-24 ES1000-24P ES1000-48 ES1000-48P ES1000-48C ES1000-48CP	▪ Support 9600 and 115200(default) baud rates, eight data bits, one stop bit and no parity
USB port	ES1000-24 ES1000-24P ES1000-48 ES1000-48P	▪ USB 2.0 Type A interface
	ES1000-48C ES1000-48CP	▪ USB 3.0 Type A interface
SFP28	ES1000-24 ES1000-24P ES1000-48 ES1000-48P ES1000-48C ES1000-48CP	▪ Full Compliance with SFP28 MSA specifications ▪ Compliant to IEEE (25GBase-SR/LR/CR) and OIF (CEI-25G-VSR) 25Gbps ▪ Support for 2.0W modules (SFF-8419 Power Class III) ▪ Passive DAC performance up to 5m@25Gbps operation

Port type	SKU-ID	Description
RJ45 data port	ES1000-24	▪ Port 1-24: 10/100/1000Mbps auto negotiation
	ES1000-24P	▪ Port 1-24: 10/100/1000Mbps auto negotiation ▪ All ports support PoE Type 4 Class 8
	ES1000-48 ES1000-48C	▪ Port 1-48: 10/100/1000Mbps auto negotiation
	ES1000-48P ES1000-48CP	▪ Port 1-48: 10/100/1000Mbps auto negotiation ▪ All ports support PoE Type 4 Class 8

1. Combo RJ45 and SFP port cannot be used at the same time.

Port LEDs

Table 1.Port Indicator LEDs

Indicator LED	Front Panel Sign	State	Description
Power status LED	PWR	Green LED on	2 PSU are normal
		Amber LED on	Any one of the PSU abnormal
		Off	The system is powered off
Fan status LED	FAN	Green LED on	All fans are normal
		Amber LED on	Anyone of the fan abnormal
		Off	The system is powered off
Alarm status LED	ALM	Green LED on	No Alarm
		Amber LED on	Critical Alarm
		Amber LED 4Hz Blinking	Major Alarm
		Amber LED 1Hz Blinking	Minor Alarm
		Off	The system is powered off
System status LED	STAT	Green and Amber LED Alternate Blinking	The system is normal
		Off	The system is powered off

Indicator LED	Description
Combo RJ45	One bi-color Green/Amber LED on left side and one Green LED on

Indicator LED	Description
Management Port	right side. 1. Use the left side dual color LED to indicate link status: a. Port link active in 1000M mode: Green On b. Port link active in 10/100M mode: Amber On c. Port is link down: LED Off 2. Use the right side single color LED to indicate Act status: a. Port link active and there is traffic: Green blink b. Port has no traffic: LED off
Combo SFP Management Port	One bi-color Green/Amber LED for SFP port. 1. Port link at GbE mode: a. Port link up: Green ON b. Port link activity: Green Blink c. Port link down: LED Off
SFP28 Port	One bi-color Green/Amber LED for each SFP28 port. 1. For port link at 25GbE mode: a. Port link up: Green ON b. Port link activity: Green Blink c. Port link down: LED Off 2. For port link at 1/10GbEmode: a. Port link up: Amber ON b. Port link activity: Amber Blink c. Port link down: LED Off
RJ45 Data Ports	One Bi-color Green/Amber LED on left side and one Bi-color Green/ Amber LED on right side. 1. Use the left side dual color LED to indicate link status: a. Port link active in 1000M mode: Green On b. Port link active in 10/100M mode: Amber On c. Port is link down: LED Off 2. Use the right side dual color LED to indicate Act status and PoE

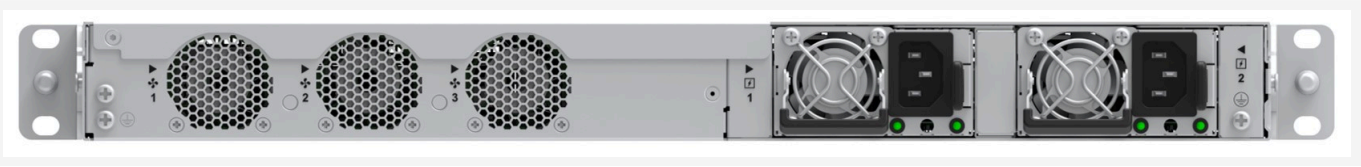
Indicator LED	Description
	status: a. Port link active and there is traffic: Blink LED (Green or Amber per PoE State) b. Port PoE power Disabled: Green ON c. Port PoE power Enabled : Amber ON d. Port PoE power Denied: Alternate Blink Amber/Green for 1 minute then return to normal operation e. Port has no traffic: LED off

Rear Panel

The rear panel of all ES1000 systems are identical and feature two hot-swappable AC/DC power supply units (PSUs) for redundancy, along with three fixed fans.

Figure 5. ES1000-24/24P and ES1000-48/48P/48C/48CP

Figure 6. ES1000-24/24P and ES1000-48/48P/48C/48CP



> ⓘ NOTE: Though the PSUs power capability varies, the rear panel of all ES1000 systems is visually identical.

PSU LED descriptions can be found under PSU LEDs.

Supported Cables

The ES1000 provides four (4) SFP28 ports and supports DAC (Direct Attach Cable) and Optical module. User can select the cables in the below table.

Table 2.Supported Cables

Type	Manufacturer	Model	Specification
25G SFP28 to SFP28 DAC	AMPHENOL	NDCCGF-0001	1M, 30AWG
25G SFP28 to SFP28 DAC	AMPHENOL	NDCCGF-0005	3M, 26AWG
25G SFP28 to SFP28 DAC	AMPHENOL	NDCCGJ-0005	5M, 26AWG
10/25G SFP28 to SFP28 Fiber	FINISAR (for optical module)	FTLF8536P4BCL	OM3/OM4 MMF

PSU Power Options

ES1000 supports redundant hot-swappable AC power supply units. The power supply support input voltage from 100V-240V. Multiple power supply wattage options are offered to match the desired Power Over Ethernet requirement of the end user.

1600W PSU

2 x1600W PSUs are used in the ES1000-48P and the ES1000-48CP, supporting F2B and B2F airflow.

> ⓘ NOTE: When operating within a voltage range of 200-240V (high line mode), the PSU can deliver an output power of 1600W. However, in low line mode (100-127V), the output power is reduced to 1000W. The PSU does not support 1+1 redundancy if the total system power demand exceeds the capacity of a single power supply.

920W PSU

2 x 920W PSUs are used in the ES1000-24P, supporting F2B and B2F airflow.

- F2B (front to back)
- B2F (back to front)

> ⓘ NOTE: The PSU does not support 1+1 redundancy if the total system power demand exceeds the power capacity of a single PSU.

550W PSU

2 x 550W PSUs are used in the ES1000-24, ES1000-48C and ES1000-48, supporting F2B and B2F airflow.

- F2B (front to back)
- B2F (back to front)

> ⚠ CAUTION: The airflow of the PSUs and Fans must be same F2B or B2F. Do not mix different airflow types within the chassis.

PoE Description

ES1000-24, ES1000-48 and ES1000-48C are non-PoE SKUs.

ES1000-24P, ES1000-48P, and ES1000-48CP are PoE SKUs. These SKUs support PoE Type 4

Class 8.

> ⚠ **CAUTION:** The PSU does not support 1+1 redundancy if the total system power demand exceeds the power capacity of a single PSU .

> ⓘ **NOTE:** For PoE power supply, it is recommended to use CAT 5e or higher, pure copper twisted pair network cable.

Table 3.Power Distribution of AC Power Input 200-240V (High line)

SKU ID	PSU	System	Max Power/ Port	PoE Budget	Description
ES1000-24P	2 x 920W	200W	90W	1550W	Up to 17 ports x 90W at the same time
	1 x 920W	200W	90W	630W	Up to 7 ports x 90W at the same time
ES1000-48P ES1000-48CP	2 x 1600	200W	90W	2910W	Up to 32 ports x 90W at the same time
	1 x 1600	200W	90W	1310W	Up to 14 ports x 90W at the same time

Table 4.Power Distribution of AC power Input 100-127V (Low line)

SKU ID	PSU	System	Max Power/ Port	PoE Budget	Note
ES1000-24P	2 x 920W	200W	90W	1550W	Up to 17 ports x 90W at the same time

SKU ID	PSU	System	Max Power/ Port	PoE Budget	Note
	1 x 920W	200W	90W	630W	Up to 7 ports x 90W at the same time
ES1000-48P ES1000-48CP	2 x 1000W	200W	90W	1710W	Up to 19 ports x 90W at the same time
	1 x 1000W	200W	90W	710W	Up to 7 ports x 90W at the same time

ⓘ NOTE: When operating in low line mode (100-127V), the output power of the 1600W PSU is reduced to 1000W, while the 920W PSU maintains the same output power in both high line and low line modes.

PSU LEDs

Table 5.PSU Indicator LED Description

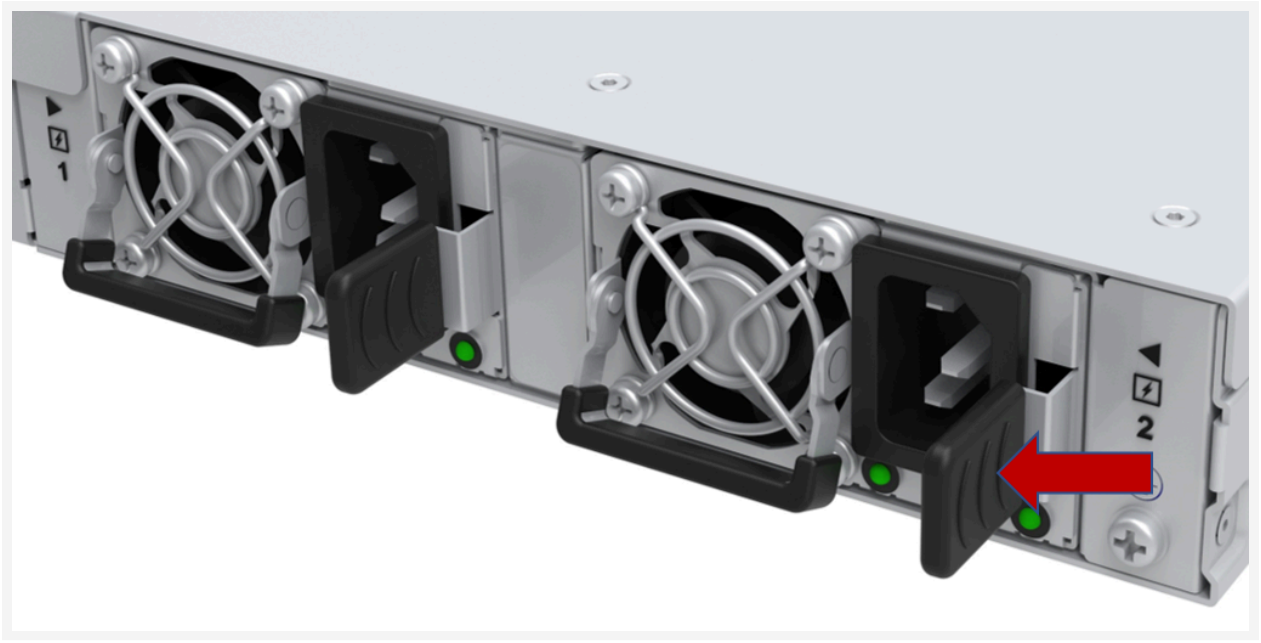
Indicator LED	Rear Panel Sign	State	Description
550W	P-1/P-2	Green LED on	PSU output ON and OK
		Amber LED on	PSU failure or AC in power lost, but a second power is powered
		Off	PSU module is powered off
920W & 1600W	P-1/P-2	Left LED(DC OK) Green on Right LED(AC OK) Green on	Power supply DC outputs on and OK
		Left LED(DC OK) is Green/0.5Hz flashing Right LED(AC OK) Green on	AC present / Only standby outputs on
		Left LED(DC OK) Red on Right LED(AC OK) Green on	Power supply failure, PSU shut down
		Left LED(DC OK) Green on Right LED(AC OK) is Red/0.5Hz flashing	One PSU is working normally, but the AC power supply of the other PSU is abnormal.

PSU Removal and Installation

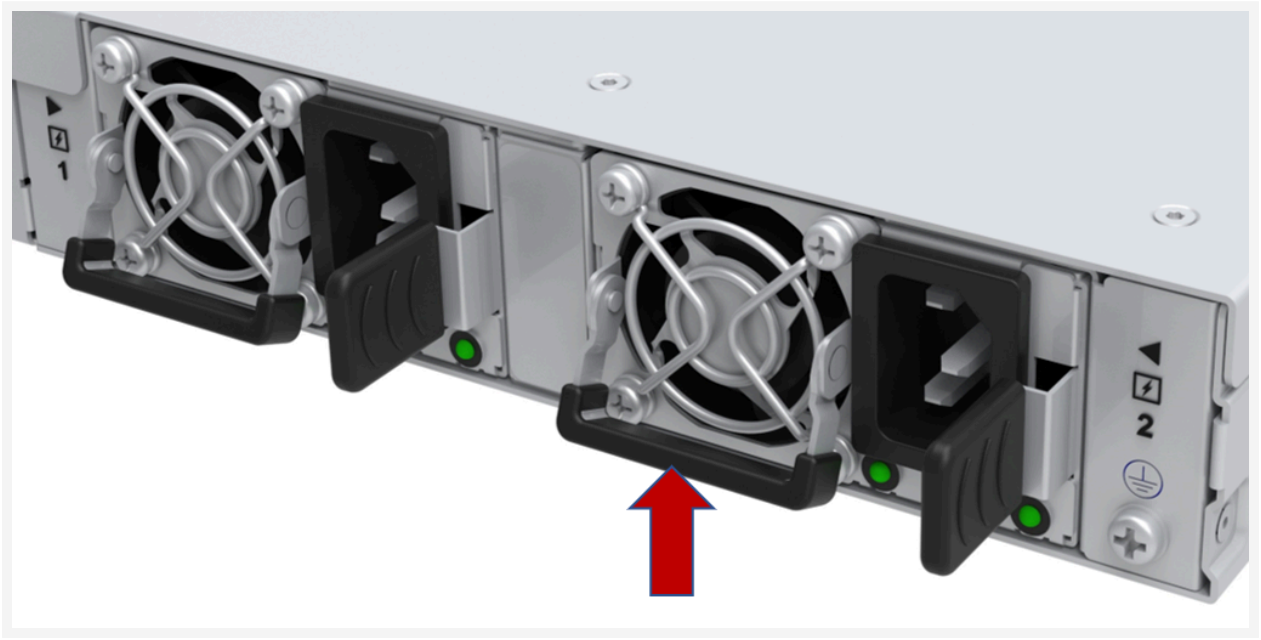
Procedure

1. Disconnect the power cord.

2. Press the black tab next to the power receptacle to release the latch.



3 Lift the handle, then pull straight out of chassis.



4 Reverse the steps to reinstall.

Chassis Installation

ES1000 is designed to be installed in a standard 19" square hole, four post rack. The bracket kit is only for 19 inch (483mm) wide, standard square hole racks, with a depth ranging from 22 inches ~ 33.5 inches (558mm ~ 850mm) as measured from rack post to rack post. This chapter covers the tools and procedures necessary to correctly and safely install the ES1000 enterprise access switch. Before beginning, create a clean, stable, and level work surface.

> ⓘ NOTE: The power distribution unit (PDU) location in the rack should avoid interference with the cable management accessory (CMA) and potential removal of field replaceable units (FRUs) from the rear of the chassis. A wider rack enclosure width is recommended along with suitable PDU and power cord plug orientation.

> ⚠ CAUTION: Use two or more people to mount chassis into rack.

Installation Tools

Gathering the following tools before starting the chassis installation is recommended.

- Phillips Head (PH#1 and PH#2) slotted screwdrivers
- Standard flat blade screwdriver
- Anti-static wrist strap
- Anti-static overalls
- Protective gloves

Rail Kit Assembly

There are several considerations to keep in mind when installing a rail kit in a server rack. Following these recommendations will ensure a successful installation.

> ### Elevated Operating Ambient Temperature
> If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room temperature. Therefore, consideration should be given to installing the equipment in an environment where the chassis does not exceed the maximum ambient temperature (Tma) specified.

Reduced Air Flow

Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

Open Rack Mounting

Care should be taken to prevent the rack frame from obstructing the ventilation openings. Be sure to check the chassis positioning after installation to avoid overheating.

Circuit Overloading

Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over-current protection and supply wiring.

Reliable Grounding

Reliable grounding (earthing) of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (for example, use of power strips).

ⓘ NOTE: Rack mounted equipment must not be used as a shelf or work space. Do not add weight to rack mounted equipment.

For safety, a rack should should always be loaded from the bottom up. That is, install the equipment that will be mounted in the lowest part of the rack first, then the next higher systems, etc.

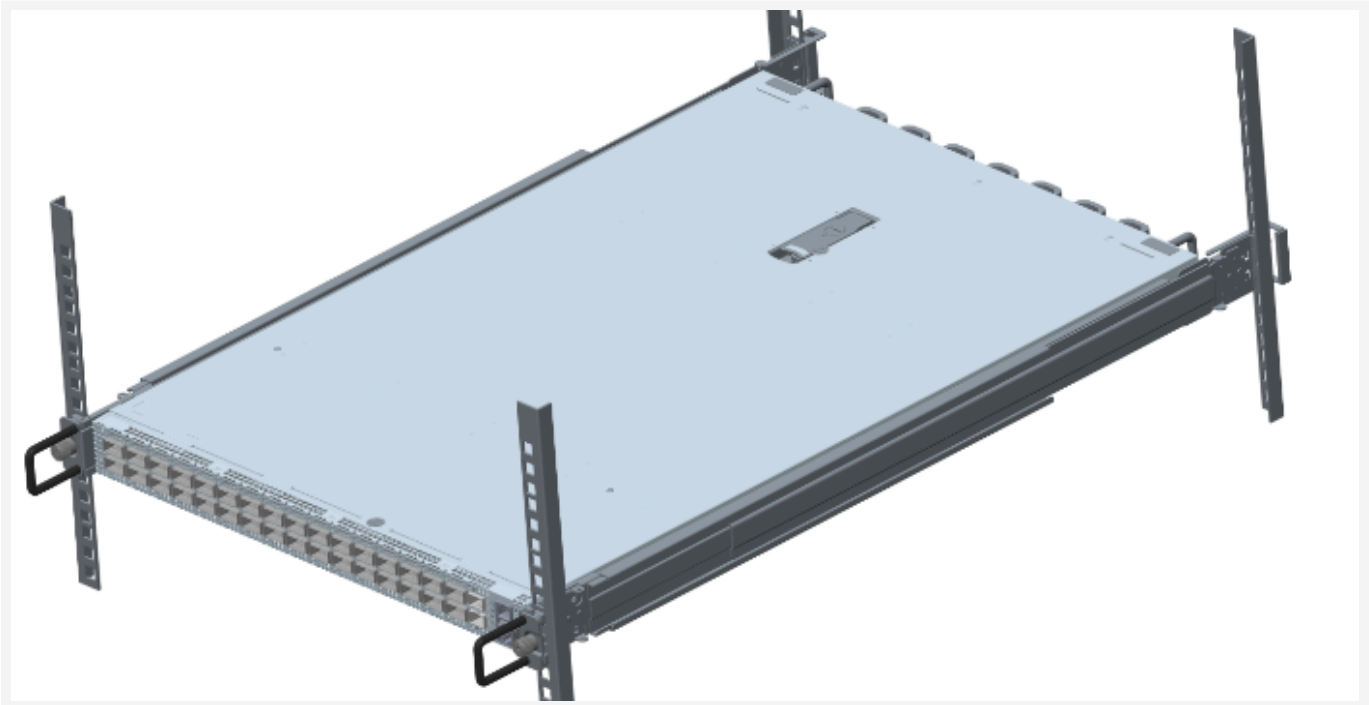
⚠ CAUTION: To prevent the rack from tipping during equipment installation, the anti-tilt bar on the rack must be deployed.

If a standard 19" rack is not available, ES1000 can be placed on a clean, stable, and level surface. Leave a clearance of 100mm (~4 inches) around the chassis for ventilation. Do not place anything on top of the chassis.

Installing the Chassis

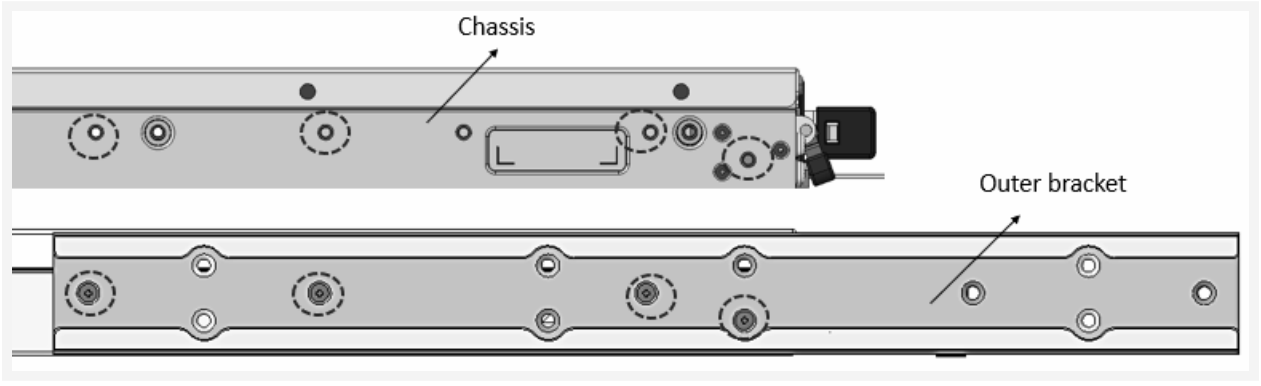
Context

> ⓘ NOTE: The following illustrations may display a different product. However, the installation process is similar to other Celestica rack-mountable networking products.



Procedure

1. Attach the two outer brackets with M4 screws provided in the accessory kit.
2. Align outer bracket with chassis holes (chassis left is same as right).



3. Lock outer bracket with M4 screw (PH#2 slotted screwdriver)

Figure 7. Secure Bracket to Chassis

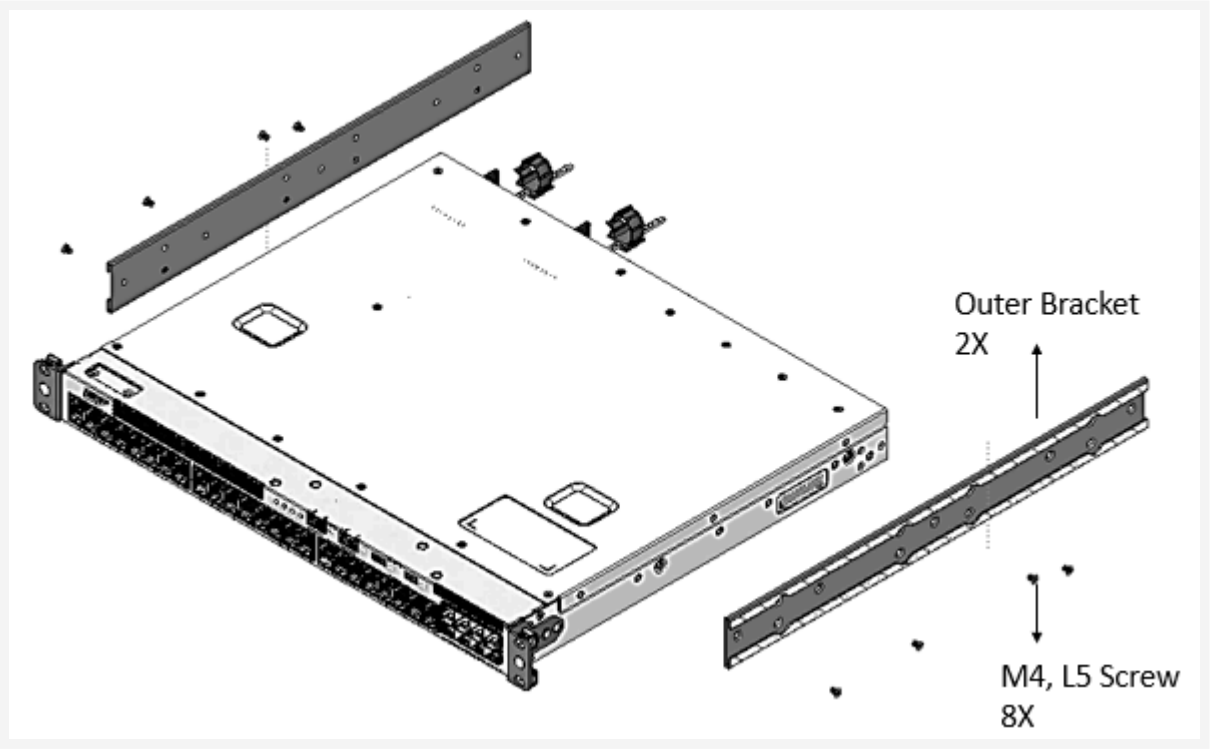
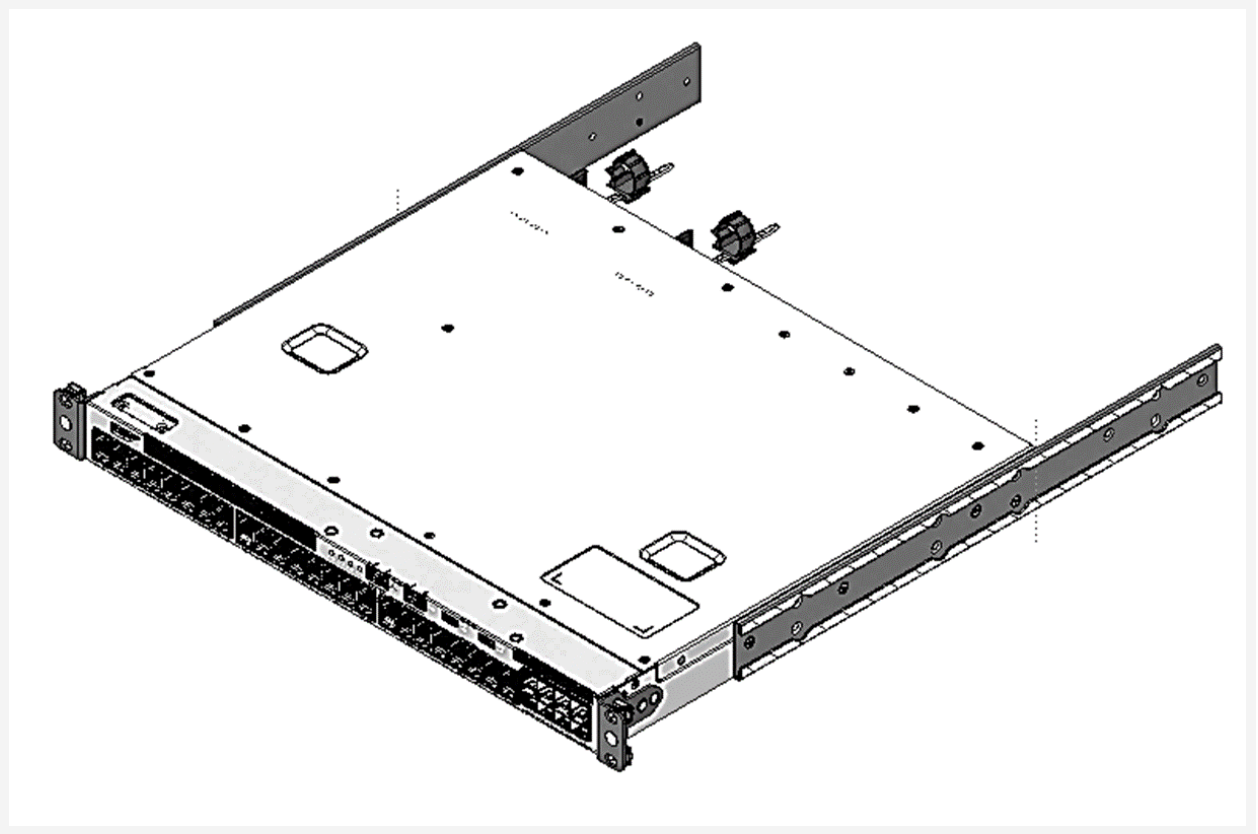


Figure 8. Inner Rail Bracket Installed to Chassis



4 Push the chassis with the outer bracket locked in step 1 above from the front side by one person, and push the inner bracket into the outer brackets (sleeve) slot on the chassis

from the rear side by another person at the same time, until guide pin (detail 1) and inner bracket guide pin (detail 3) fit in rack square holes. Then, lock them with M6 screws (PH#3 slotted screwdriver).

5. Press chassis and inner bracket until M6 screws fully lock.
6. Save enough space around the switch for good air circulation.

Ground Lug Installation

Context

The ground lug assembly (GLA) is used to safely and effectively ground the ES1000's chassis to the rack in which it is installed. This is an important task in the overall installation process of the enterprise access switch.

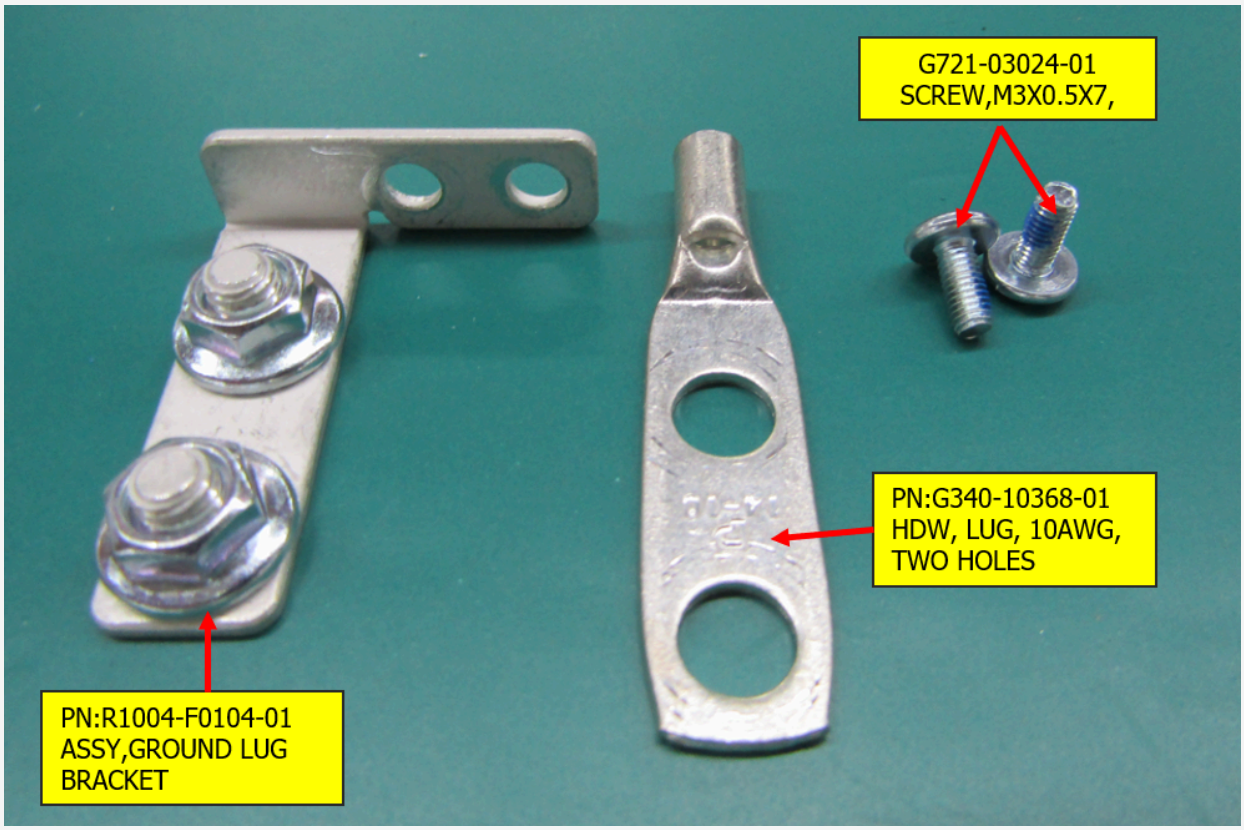
> ⓘ NOTE: The GLA is not applicable to the AC SKUs of the enclosure.

To install GLA, proceed with the following steps:

Procedure

1. Gather a #2 Philips-head screwdriver, an eight millimeter hex socket, and an inch-pound torque wrench.

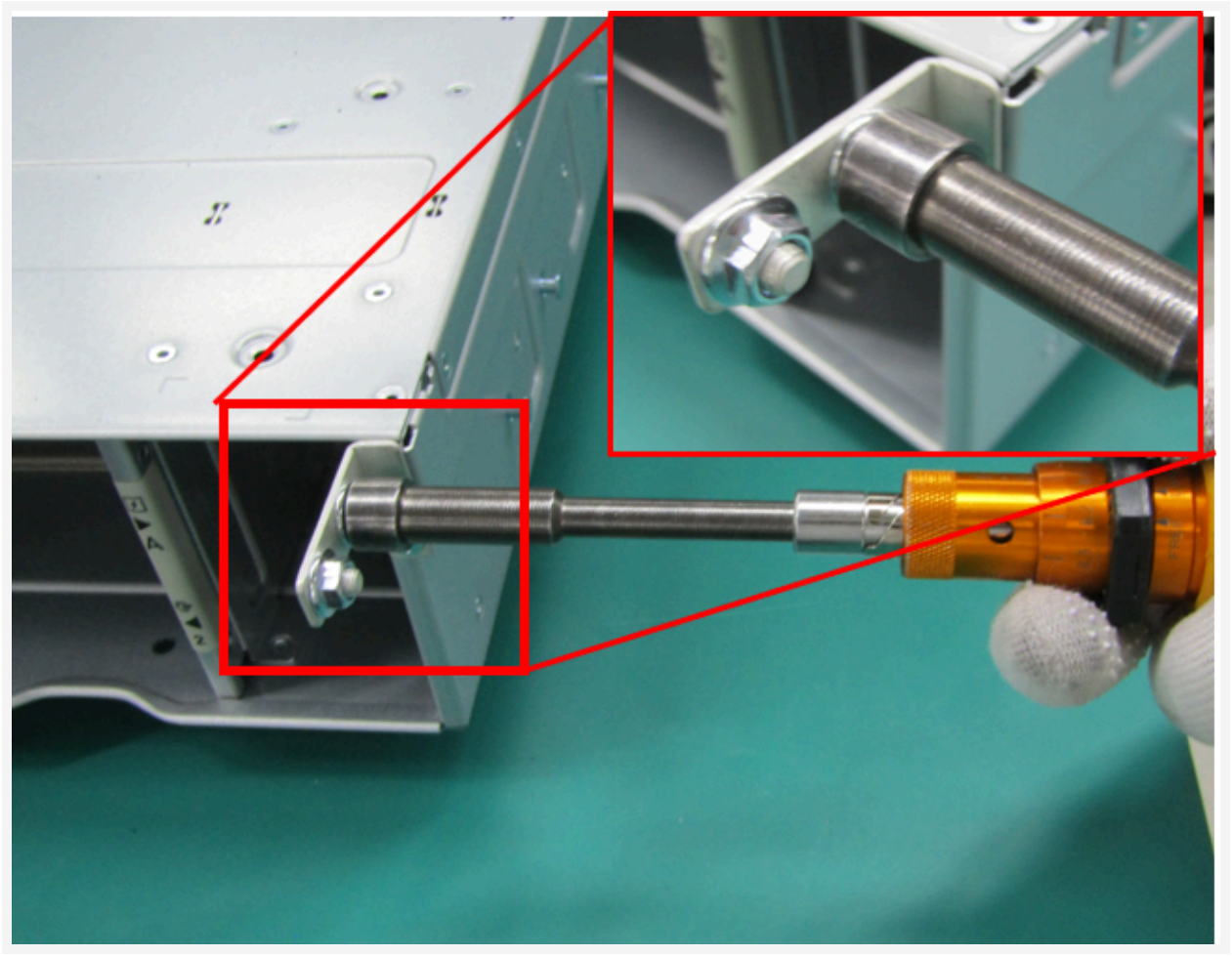
2 Verify the part numbers as listed within image.



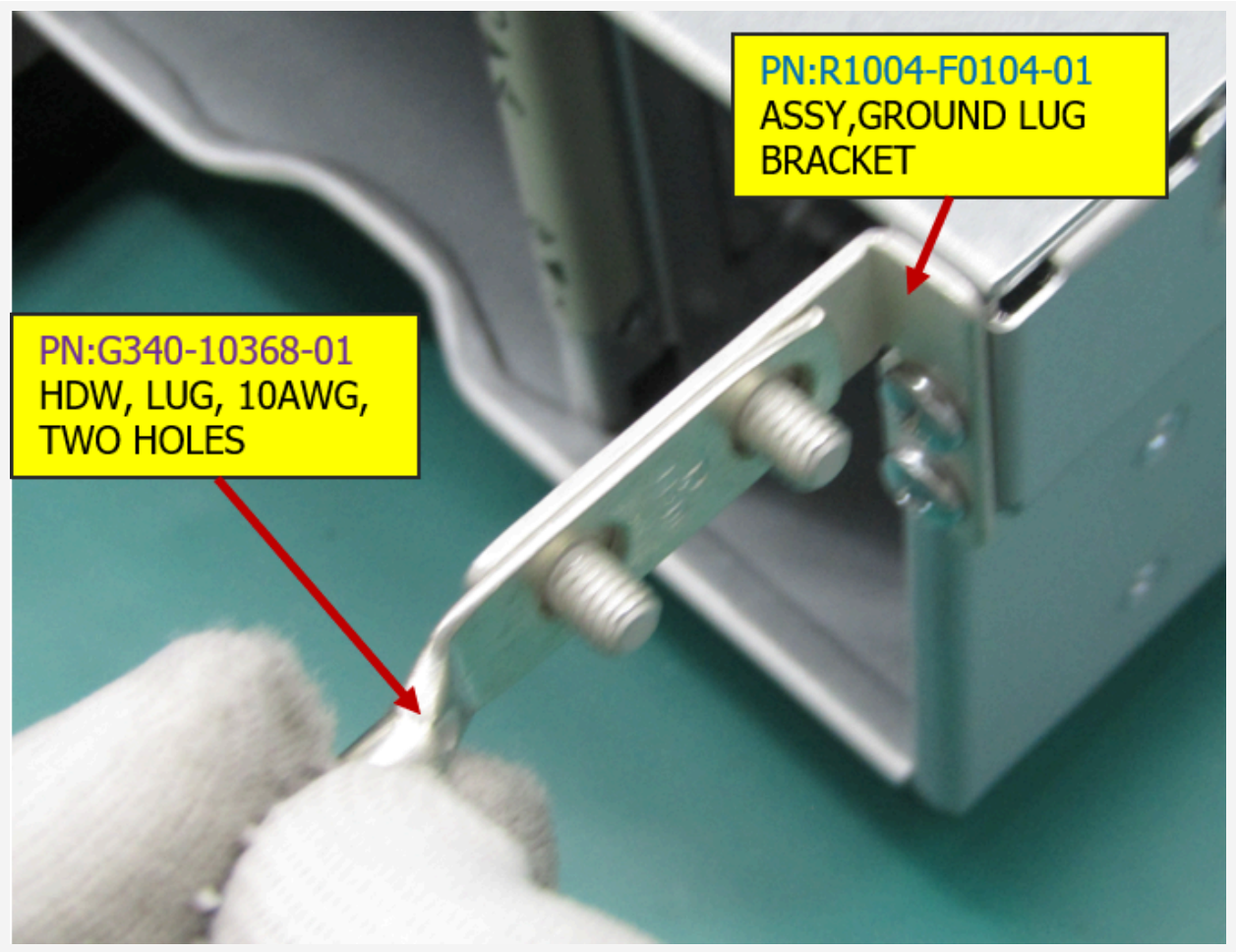
⚠ CAUTION: The image shows the ground lug assembly and the grounding wire terminal. The terminal must have a #10 AWG wire (not shown) crimped within it. The other end of the grounding wire must be securely attached to an unpainted metal surface on the rack. Failure to do so may result in system damage or failure and possible physical injury.

3 Tighten both screws to 4.5 inch/pounds (+/- 0.5 in/lb).

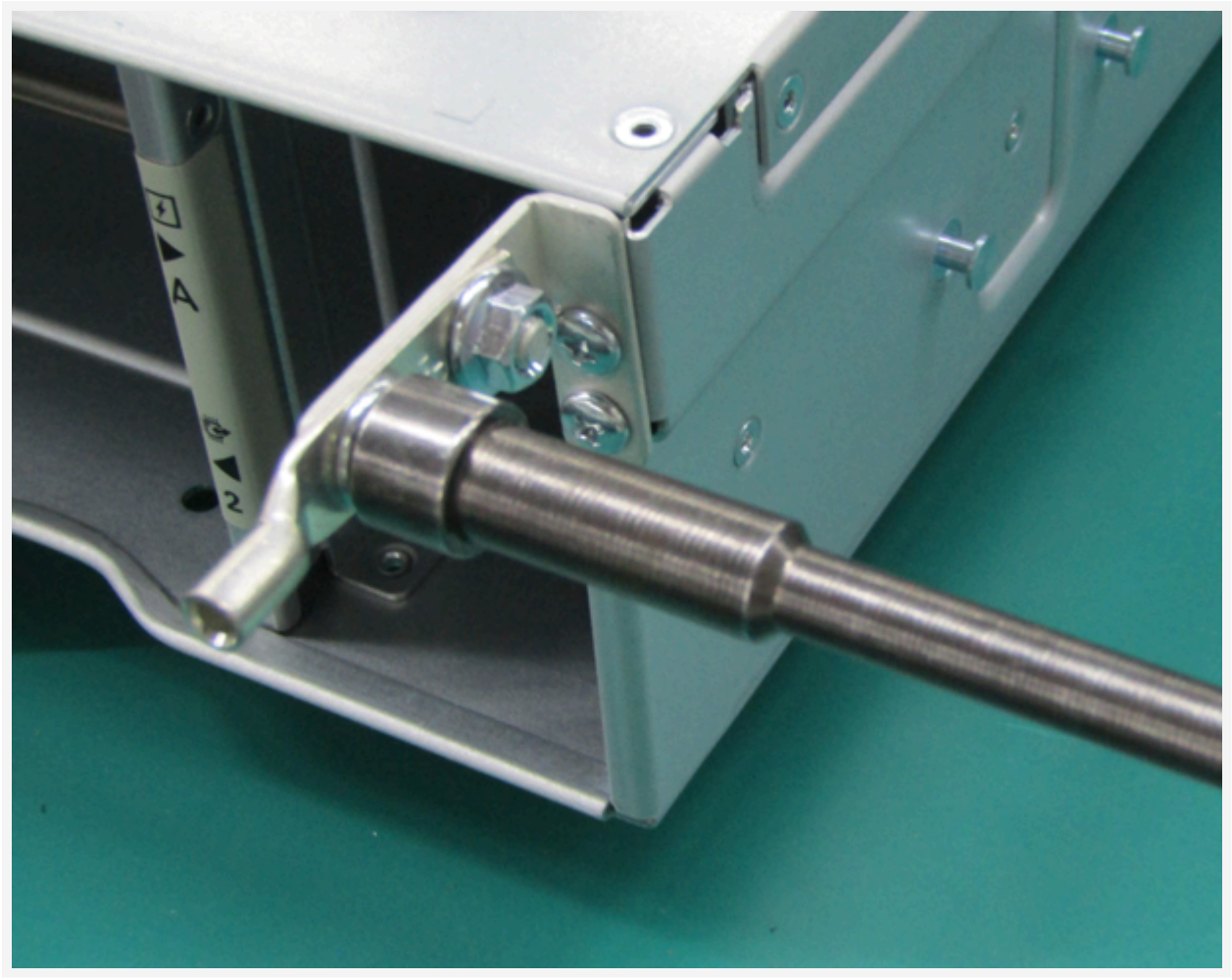
4 Remove both nuts and washers from grounding bracket.



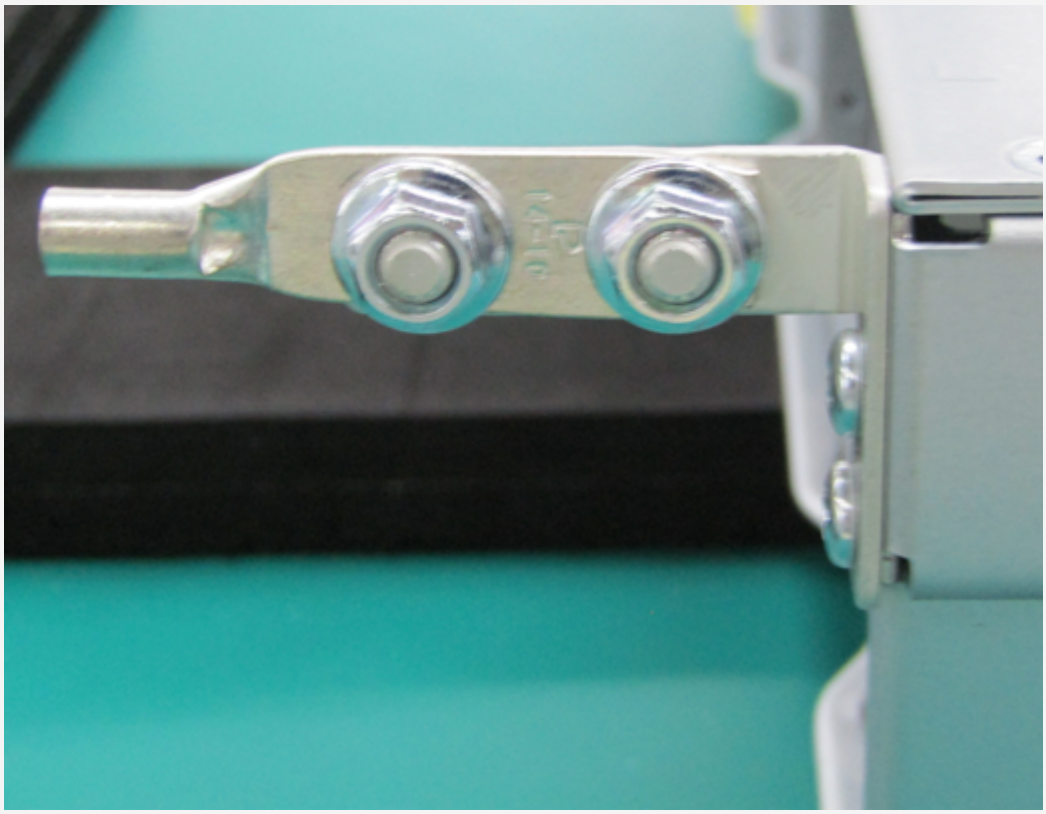
5 Attach the grounding wire terminal and reinstall the washers and nuts.



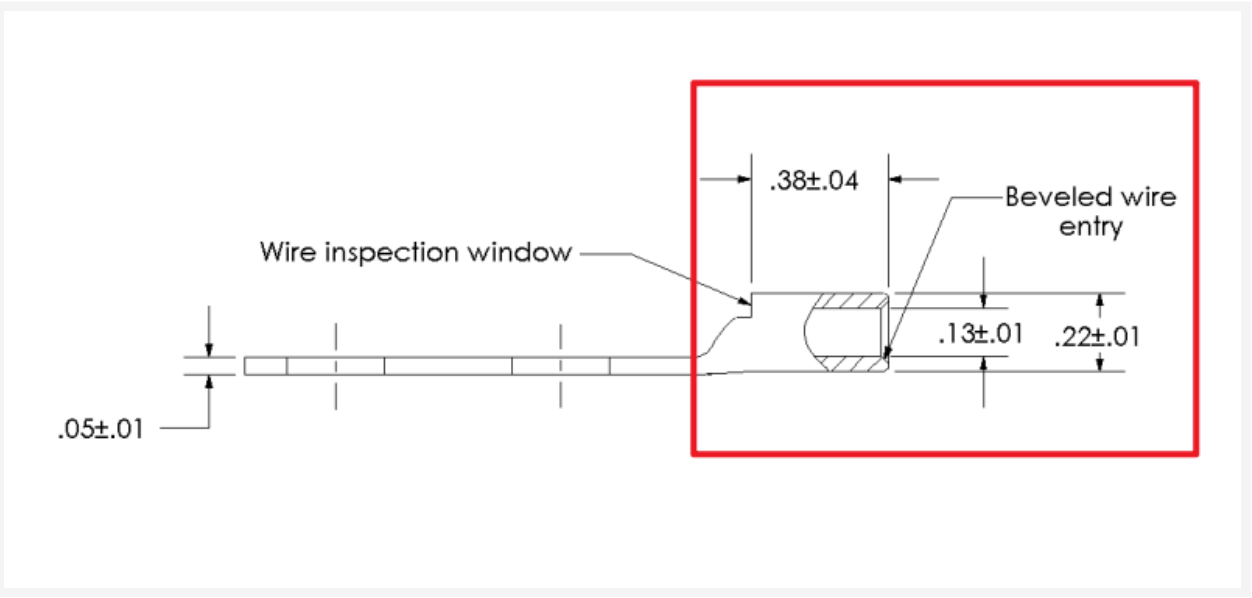
6 Tighten both nuts to 4.5 inch/pounds (+/- 0.5 in/lb).



7 The GLA installation process is complete.



8 When crimping the 10AWG cable to the lug, remove 0.38" of shielding to expose the metal wire. Slide it into the lug and ensure metal-to-metal contact before crimping.



⚠ CAUTION: The terminal must have a #10 AWG wire (not shown) crimped within it. The other end of the grounding wire must be securely attached to an unpainted metal surface on the rack. Failure to do so may result in system damage or failure and possible physical injury.

Safety Precautions

Read this section before beginning any procedure. For your safety and the proper maintenance and operation of the ES1000, please follow these precautions when setting up this device.

- Follow all cautions and instructions marked on the equipment.
- Ensure the voltage and frequency of your power source match the voltage and frequency noted on the system's electrical rating label.
- Never insert any objects through openings in the chassis. Dangerous voltages, and/or moving parts may be present. Conductive external objects could produce a short circuit that could damage the system or cause electric shock, resulting in serious personal injury.
- In order to not exceed operational temperature guidelines, do not block or cover the openings of your system. Never place a product near a radiator or heat register. Failure to follow these guidelines may cause overheating and affect the reliability of the device.
- Do not drop the product or subject it to physical shock.
- Keep liquids away from the system.
- When shipping the product, pack it inside the original or equivalent packaging and ship on a pallet.
- Celestica does not assume any responsibility for problems caused by unauthorized repairs or replacement.
- Keep flammable items away from the product.
- Inspect and maintain the site and the system regularly. Failure to do so may reduce the lifespan of this system and possibly void the warranty.

⚠ CAUTION:

The Celestica ES1000 does not produce or have any laser-related functions. If you connect and install a device that supports laser functions such as an optical transceiver, we recommend that you choose a product certified to the relevant standards as shown below.

- EN 60825-1, 1st Edition
- EN 60825-1 Safety of Laser Products — Part 1: Equipment Classification Requirements and Users' Guide
- EN 60825-2 Safety of Laser Products — Part 2: Safety of Optical Fiber Communication Systems
- FDA Regulation 21CFR 1040.10 and 1040.11

Power

Depending on the type of power system your device has, the following symbols may be used.

On - Connects power to the system. This can be AC or DC power depending on product and model.

Off - Disconnects power to the system.

Standby - The power switch is in standby mode (low power).

⚠ CAUTION: Please check the input to ensure proper grounding of the power supply unit (PSU) before powering on the system.

⚠ CAUTION: Improper power supply system grounding, extreme fluctuation of the input source, and transients (spikes) can result in data errors, or even hardware damage.

⚠ CAUTION: The product may be equipped with multiple power supplies. To remove all hazardous voltages, disconnect all power cords.

⚠ CAUTION: This device is designed to work with power systems having a grounded neutral or a grounded return for direct current (DC) powered products. To reduce the risk of electric shock, do not plug the chassis into any other type of power system. Contact your facilities manager or a qualified electrician if you are not sure what type of power is supplied to your building.

⚠ CAUTION: The system may have more than one power supply cable. To reduce the risk of electrical shock, a trained service technician must disconnect all power supply cables before servicing the system.

ⓘ NOTE:

This symbol  is used when multiple power supplies are installed in a system. This warning label is typically found on the back of the device near the PSU.

Power Connection

Installation of this equipment must comply with local and regional electrical regulations governing the installation of information technology equipment by licensed electricians. For electrical power ratings on options, refer to the power rating label or the user documentation supplied with that option.

⚠ CAUTION: Do not use the power cord provided with your equipment with any other products. Only use the power cord(s) provided with the product to power it. Do not use household extension cords with your product.

ⓘ NOTE: To disconnect power, remove all power cords from unit.

ATTENTION: DÉBRANCHER LES TOUT CORDONS D'ALIMENTATION

POUR DÉCONNECTER L'UNITÉ DU SECTEUR.

WARNUNG: Wenn Sie das Gerät zwecks Wartungsarbeiten vom Netz trennen müssen, müssen Sie beide Netzteile abnehmen.

当心：如要切断电源，请将全部电源线都从机器上拔掉。

當心：如要切斷電源，請將全部電源線都從機器上拔掉

Regulatory Information

FCC (US)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

> ⓘ 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/her own expense.

> ⓘ NOTE: Any modifications made to this device that are not approved by Celestica may void the authority granted to the user by the FCC to operate this equipment.

ICES-003 (Canada)

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.

CE (European Community)

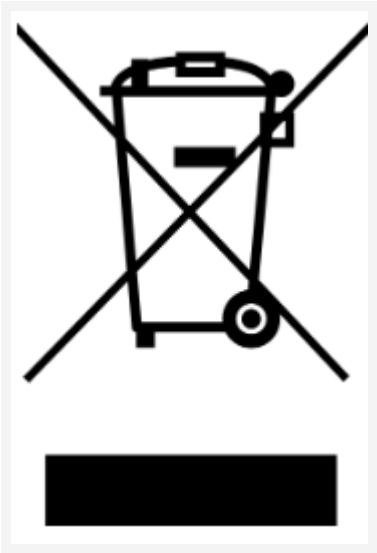
This product conforms to the following European Directive(s) and Standard(s): Application of Council Directive: 2014/35/EU, 2014/30/EU, 2011/65/EU.

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 above symbol 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 also 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.

VCCI (Japan)

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.

Contact Information

Celestica operates a customer service portal.

- Self-support resources (knowledge base, FAQ, common fixes, new firmware) are available.
- Our support teams are connected to the support portal and can receive notifications for requests.
- The portal also tracks and collects customer inputs for further improvements to our products and services.

Customers can register and request support (as well as search information in the knowledge base) at: https://customersupport.celestica.com/csm
In case there are any questions or issues using the customer portal visit: https://www.celestica.com/contact-us. For immediate questions, please feel free to call your responsible account manager.