



PSA5000 Hardware Guide



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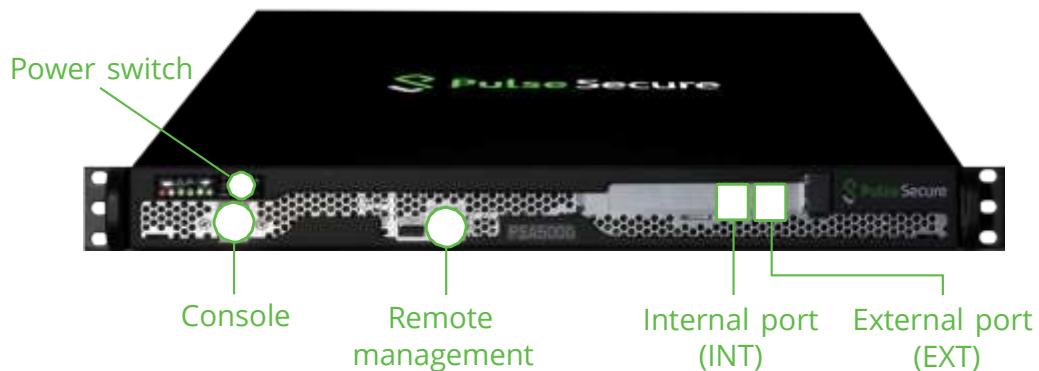
Revision History

Revision Number and Date	Description
1.3, September 2020	Updated the "Power Rating" and "Component Specifications" sections.
1.2, September 2018	Added air flow direction details in the "Air Flow Direction" section.

System Overview

Introduction

The PSA5000 features a unique and highly-optimized design for low wattage processor platforms. It is equipped with a high-efficiency 80%+ low noise 200W power supply. High-performance fans provide ample optimized cooling.



Note: For added system security, the USB port has been disabled.

LED Control Panel

The control panel located on the front of the PSA5000 chassis includes power control buttons and status LEDs. This section describes the LED indicators and the appropriate responses.



Control Panel Buttons

The control panel includes a power on/off button and a reset button.



Power: The main power switch is used to apply or remove power from the power supply to the server system. Turning off system power with this button removes the main power but keeps standby power supplied to the system. Therefore, you must unplug system before servicing.



Reset: The reset button is used to reboot the system.

Control Panel LEDs

The control panel displays six LEDs to monitor the system.



Information LED: Alerts operator of several states, as noted in the table below:

Status	Description
Continuously on and red	An overheat condition has occurred. This may be caused by cable congestion.
Blinking red (1Hz)	Fan failure; check for an inoperative fan.
Blinking red (0.25Hz)	Power failure; check for a non-operational power supply.



NIC1 (GLAN1): Associated with the Management port. It indicates network activity when flashing.



NIC2 (GLAN2): Unused. Will always be off.



HDD: Indicates IDE channel activity or SATA drive activity when flashing.



Power: Indicates power is being supplied to the system power supply. This LED should be illuminated when the system is operating.



Power Failure: When this LED flashes, it indicates a power failure in the power supply.

Management Port LEDs

The management port has two LEDs:



The yellow LED indicates activity, while the link LED may be green, amber, or off to indicate the speed of the connection.

LED	Color	Description
Activity	Yellow (flashing)	Active
Link	Off	No connection
	Amber	1 Gbps speed
	Green	100 Mbps speed

INT and EXT Port LEDs

Two LAN ports are located on the NIC card. Each Ethernet port has two LEDs:



LED	Color	Description
Activity	Yellow (blinking)	LAN active
Link	Off	10 Mbps link speed or no connection
	Orange	1 Gbps link speed
	Green	100 Mbps link speed

Air Flow Direction

The following table gives the air flow direction of the power supply fan and internal CPU fan.

Component	Air Flow Direction
Power Supply Fan	To the rear of the unit
Internal CPU Fan	To the rear of the unit

Beeping and Alarms

Beep Code	Description
5 short beeps + 1 long beep every 5 seconds	No memory detected in the system
Continuous beep ("i" LED on front panel turns RED)	System overheat condition

Hardware Specifications

This chapter describes the specifications of your system.

System Measurements

These figures are for an unpackaged system.

Category	Description
Form factor	1U chassis
Width	17.2 inches (43.7 cm)
Height	1.7 inches (4.3 cm)
Depth	9.8 inches (24.9 cm)
Weight	10 lbs (4.5 kg)

Power Rating

Below is the maximum power rating for the power supply:

Category	Description
Power type	Single-phase
Input voltage range	100 - 240V
Input current	2.6 Amps maximum
Input wattage	200W
Input frequency range	50 - 60Hz

Power Consumption

A power consumption estimate is usually around 15% to 20% higher than the actual power measurement when using the Linpack HPL workload application. The user's system power consumption may vary based on the workload and environment.



Note: This power consumption data is a worst-case scenario and is meant for reference only.

Device	Max Pwr(W)	Actual Pwr(W)	+12V current (A)	+5V current (A)	+3.3V current (A)	+5VSB current(A)	-12V current(A)
Server with Motherboard, Fan and Storage drive							
Total Power	82.6	82.6					
Total Current			6.0	2.0	0.2		
1x Power Supply @ 100-240Vac Rating		200	16	8	8	2	0.5

	120 Vac input	240 Vac input
Actual output wattage from power supply (Power Supply DC output)	82.6 W	82.6 W
Efficiency of power supply	0.88t	0.90t
Total system power consumption (AC input power requirement)	93.8 Watt	91.8 Watt
Total BTU/h	320.3 BTU/h	313.2 BTU/h
Power Factor	0.98	0.96
VA	95.8 VA	95.6 VA
Input Current	0.8 A	0.4 A

Environmental Requirements

Category	Description
Operating temperature	10°C to 35°C (50°F to 95°F)
Storage temperature	(-40°C) ~ 70°C (-4°F ~ 158°F)
Relative humidity (operating)	8% ~ 90% (non-condensing)
Relative humidity (storage)	5% - 95% (non-condensing)

Component Specifications

Category	Description
CPU	Pentium G3420
Memory	8GB
Storage HDD	500GB SATA3
Security module	1x TPM 1.2
Network ports	Dual port GbE LAN (PCI)
External I/O ports	1x console RJ-45 port 1x10/100/1000 management port
Cooling	2x 4cm 4-pin PWM fans
Active CPU Heat Sink Part Number	1 x SNK-P0049A4
Estimated System Air Flow Rate at Cooling Fan Full Speed Condition	5 ~ 7.5 CFM

Regulatory Certifications

- USA - UL listed, FCC
- Canada - CUL listed
- Germany - TUV Certified
- Europe/CE Mark
- EN 60950/IEC 60950-Compliant
- CCC Exemption

Mounting in a Rack

The chassis can be mounted in a rack for secure storage and use. To set up your rack, see page 19.

Where to Get Replacement Components

Infrequently, you may need replacement parts for your system. For more details, see <https://www.pulsesecure.net/support/>.

Console and Initial Configuration

Connect Console and Network

1. Do not power on the system yet. First, get the RJ45 to DB9 serial console cable. Note: A DB9 to USB adapter is not provided.



2. Connect the RJ45 end of the cable to the appliance port labeled CONSOLE and the DB9 end to a laptop. Additionally, connect a network cable from the INT port on the appliance to a switch port:



3. On the laptop, configure a terminal emulation utility, such as HyperTerminal or PuTTY, to use these settings: 9600 speed, 8 data bits, 1 stop bit, no flow control.

To find your COM port in Windows, go to **Start > Search > Device Manager > Ports (COM & LPT) > USB Serial Port (COM#)**.

Power On the System

Do this:

1. Connect the AC power cord from the power supply to a power source.
2. The appliance will power-on automatically.
3. Observe the status LEDs (where applicable) on each power supply faceplate. If an AC power supply is correctly installed and functioning normally, the AC OK and DC OK LEDs light steadily, and the PS FAIL LED is not lit.

 **Note:** After powering off a power supply, wait at least 60 seconds before turning it back on. After powering on a power supply, wait at least 60 seconds before turning it off.

After a power supply is powered on, it can take up to 60 seconds for status indicators—such as the status LEDs on the power supply and the show chassis command display—to indicate that the power supply is functioning normally. Ignore error indicators that appear during the first 60 seconds.

Configure Basic Settings

When you boot an unconfigured PSA5000, you need to enter basic network and machine information through the console to make it accessible to the network. Based on your selection of personality, a different binary will boot up in the system. After entering these settings, you can continue configuring the PSA5000 through the administrator Web console.

During this basic setup process, you define the “personality” of the PSA5000. For example, you can set up the PSA5000 to act as a Pulse Connect Secure or Pulse Policy Secure device. You can switch personalities at any time by reconfiguring the PSA5000.

The installation process may take up to 20 minutes.

Do this to perform basic setup:

1. Enter the number corresponding to the personality for which you want to configure the PSA5000.

For example, if your screen looks like this:

Please select a factory preset personality:

[1] Pulse Connect Secure (VPN)

[2] Pulse Policy Secure (NAC)

Press 1 to install the Pulse Connect Secure package. Press 2 to install the Pulse Policy Secure package.

2. Enter **y** to proceed, and then enter **y** to accept the license terms (or enter **r** to read the license first).
3. Follow the directions in the console, and enter the machine information for which you are prompted, including the following:
 - IP address of the internal port (you configure the external port through the administrator Web console after initial configuration)
 - Network mask
 - Default gateway address
 - Primary DNS server address
 - Secondary DNS server address (optional)
 - Default DNS domain name (for example, acmegizmo.com)
 - WINS server name or address (optional)
 - Administrator username
 - Administrator password
 - Common machine name (for example, connect.acmegizmo.com)
 - Organization name (for example, Acme Gizmo, Inc.)
 - Enter random text (used for auth certificate)

After you perform the basic setup, you are ready to license the software, verify accessibility, and complete the configuration process through the PSA5000 administrator Web console.

Change the Personality

You can change your system's personality at any time.

Changing a personality deletes all configuration files and system and user data. You must perform the basic setup again to reestablish network connectivity. The installation process may take up to 20 minutes.

Do this to change the personality:

1. Start a console session.
2. Select option 4, System Operations.
3. Select option 5, Factory reset.
4. Enter the number corresponding to the personality for which you want to configure the PSA5000.

For example, if your screen looks like this:

Please select a factory-reset personality:

[1] Pulse Connect Secure (VPN)

[2] Pulse Policy Secure (NAC)

Press 1 to install the Pulse Connect Secure package. Press 2 to install the Pulse Policy Secure package.

5. Follow the prompts to complete your configuration.

To change the personality from the administrator Web console:

1. In the admin console, choose **Maintenance > System > Change Personality**.
2. Click **Browse** to select the service package to install.
3. Click **Change Now**.

Access the Web Admin Interface

1. Launch a web browser from a laptop that is network connected.
2. Point the browser at the same IP address that was assigned to the internal port followed by /admin (for example, <https://a.b.c.d/admin>).
3. When prompted with the security alert to proceed without a signed certificate, click **Yes**. When the administrator sign-in page appears, you have successfully connected your device to the network.
4. On the sign-in page, enter the administrator username and password you created earlier. Then click **Sign In**.

The administrator Web console opens to the Overview page.

Licensing the System

After you install the device and perform basic setup, you are ready to license it.

To license your device, follow instructions received in an email from Pulse Secure. For more information, see <https://www.pulsesecure.net/support>.

The device uses the common machine and organization names to create a self-signed digital certificate for use during product evaluation and initial setup.

We strongly recommend that you import a signed digital certificate from a trusted certificate authority (CA) before you deploy the device for production use.

Installation

This chapter provides instructions and tips for installing the chassis into a rack.

Preparing for Setup

Please read this section in its entirety before beginning the installation procedure.

Choosing a Setup Location

Decide on a suitable location for the rack. It should be a clean, dust-free area that is well ventilated. Avoid areas where heat, electrical noise and electromagnetic fields are generated. Place it near a grounded power outlet.

- Leave at least 25 inches clearance in front of the rack to open the front door completely.
- Leave approximately 30 inches of clearance in the back of the rack to allow for sufficient airflow and ease in servicing.
- Install in a restricted access location, such as a dedicated equipment room or service closet.

Ambient Operating Temperature

If installed in a closed or multi-unit rack assembly, the ambient operating temperature of the rack environment may be greater than the ambient temperature of the room. Install the equipment in an environment compatible with the manufacturer's maximum rated ambient temperature (TMRA).

Adequate Airflow

Equipment should be mounted into a rack so that the amount of airflow required for safe operation is not compromised.

Circuit Overloading

Avoid overloading the power supply circuitry or any overcurrent protection equipment. Use equipment nameplate ratings to calculate your requirements.

Reliable Ground

A reliable ground must be maintained at all times. To ensure this, ground the rack, itself. Pay attention to power supply connections other than the direct connections to the branch circuit, such as power strips.

Physical Rack Precautions

- Ensure that the leveling jacks on the bottom of the rack are fully extended to the floor with the full weight of the rack resting on them.
- In single rack installation, stabilizers should be attached to the rack.
- In multiple rack installations, the racks should be coupled together.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack. If this is the only unit in the rack, mount it at the bottom.
- Always make sure the rack is stable before extending a component from the rack. Extend only one component at a time. Extending two or more simultaneously may cause the rack to become unstable.

Warning: Follow these guidelines to prevent injury. Take all precautions to ensure the system remains stable

General Server Precautions

- Review the electrical and general safety precautions that came with the components you are adding to your chassis.
- Determine the placement of each component in the rack.
- Install the heaviest server components on the bottom of the rack first, and then work up.
- Use a regulating, uninterruptible power supply (UPS) to protect the server from power surges, voltage spikes and to keep your system operating in case of a power failure.
- Allow the hard drives and power supply modules to cool before touching them.
- Always keep the rack front door, all panels and all components on the servers closed when not servicing, to maintain proper cooling.

Warning: If you unscrew and open the chassis cover, it will void your product warranty. There is a tamper proof seal over the screws that looks like this:



Rack Mounting Instructions

There are a variety of rack units on the market, so the assembly procedure might differ slightly. Refer to the installation instructions that came with your rack unit.

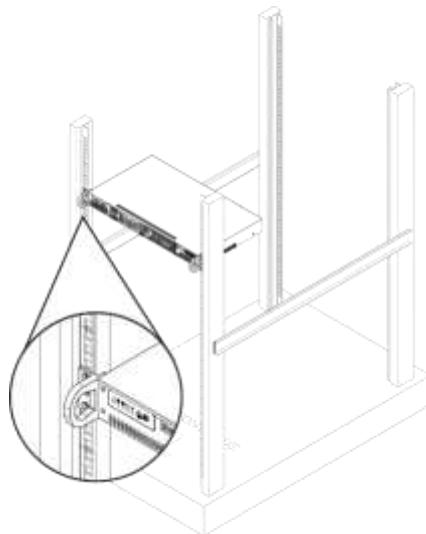


Figure: Installing the Chassis into a Rack



Note: Figures are for illustrative purposes only. Servers should always be installed in racks from the bottom up.

Installing the Chassis into a Standard Rack

Installing the Chassis in a Standard Rack

1. Confirm that chassis includes the four mounting screws required to mount the chassis into a rack.
2. Align the thru holes of the chassis with the thru holes of the rack.
3. Insert the mounting screws into the thru holes in the front of the chassis and through the thru holes in the rack.



Warning: Do not pick up the server by the front handles. They are designed to pull the system from a rack only.

Standard Warnings and Compliance

About Standard Warnings

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

Safety Certifications

- USA - UL listed, FCC
- Canada - CUL listed
- Germany - TUV Certified
- Europe/CE Mark
- EN 60950/IEC 60950-Compliant
- CCC Exemption

Electrical Safety

Basic electrical safety precautions should be followed to protect yourself from harm and the system from damage:

- Be aware of the locations of the power on/off switch on the system, as well as the room's emergency power-off switch, disconnection switch, or electrical outlet. If an electrical accident occurs, you can quickly remove power from the system.
- Do not work alone when working with high voltage components.
- Power should always be disconnected from the system when removing or installing system components. When disconnecting power, you should first power down the system with the operating system and then unplug the power cords from all the power supply modules in the system.
- When working around exposed electrical circuits, another person who is familiar with the power-off controls should be nearby to switch off the power, if necessary.
- Use only one hand when working with powered-on electrical equipment. This is to avoid making a complete circuit, which will cause electrical shock. Use extreme caution when using metal tools, which can easily

damage any electrical components they come into contact with.

- Do not use mats designed to decrease electrostatic discharge as protection from electrical shock. Instead, use rubber mats that have been specifically designed as electrical insulators.
- The power supply power cord must include a grounding plug and must be plugged into grounded electrical outlets.
- Use a grounded wrist strap designed to prevent static discharge.

General Safety

- Keep the area around the system clean and free of clutter.
- While working on the system, do not wear loose clothing such as neckties and unbuttoned shirt sleeves, which can come into contact with electrical circuits or be pulled into a fan.
- Remove any jewelry or metal objects from your body, which are excellent metal conductors that can create short circuits and harm you if they come into contact with areas where power is present.



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。

此警告符号代表危。

您正处于可能受到重害的工作环境中。在您使用始工作之前，必充分意到触的危，并熟掌握防止事故生的准工作程序。根据每警告尾的声明号找到此的安全性警告明的翻文本。

此警告符号代表危險。

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 von 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.

תקנון הצהרות אזהרה

הצהרות הבאות דן אזהרות על פי תקני החשיפה, על מנת להזהיר את המשתמש מפני חבלה פיזית אפשרית. במידה ויש שאלות או היבטים מסוימים בנוגע לחשיבותם של מרכיבים מסוימים, יש ליצור קשר עם מחלקת מכינה טכנית של סופרמייקרו. טכנאים מוסמכים בלבד רשאים להתყין או להגדר את הרכיבים.

יש לקרוא את הנספח במלואו לפני התקנת או הגדרת הרכיבים במאזורי סופרמייקרו.

تحذر! هذا الزهر عُ خطر أَكْ حالةُ وَكِي أَى تسبب فَاصابة جسدُه. تعول على أي هعذات، كي على عن بالو خاطر الأجهة عي الدواز قيل أى الكهزبيءة وَكِي على دراًءة بالو وارسات النقائِيِّة لـ وَعْ وَفِي عَأَي حادث استخدم رفق البِيِّن الـ وَصَصْ فَـ هـ كـ تـحدـرـ لـ العـلـرـ تـرجـونـها

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 waarschuwingssymbool 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 接 源前，先 安 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.

יש לקרוא את הוראות התקינה לפני חיבור המערכת למקור מתח.

اقر إرشادات التركيب قبل توصيل النظام إلى مصدر للطاقة

시스템을 전원에 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。

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 品的短路(过 流)保 由建筑物的供 系 提供, 确保短路保 的 定
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

מוצר זה מסתמך על הגנה המותקנת במבנה למניעת קוצר חשמלי. יש לוודא כי
המפסקה המוגן מפני הקצר החשמלי הוא לא יותר מ 20 V, 250

هذا المنتج يعتمد على معدات الحماية من الدوائر القصيرة التي تم تثبيتها في
المنطقة
أكد من أن تقييم الجهاز الوقائي ليس أكثر من: 250V, 20A,

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 electrische 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.

電源切斷の警告

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 シャーシー内部にアクセスするには、

システムの電源はすべてのソースから切離され 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 机箱并安 或移除内部器件前,必 将系 完全断 ,并移除 源 。

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 chassis pour installer ou enlever des composants de système.

אזהרה !

יש לנתק את המערכת מכל מקורות החשמל ויש להסיר את כבל החשמלי מהספק
לפני גישה לחלק הפנימי של המארז לצורך התקנת או הסרת רכיבים.

يجب فصل جميع مصادر انطاقت وإزالت سلك انكهرباء من وحدة امداد
انطاقت قبم
انفصل إنى انمناطق انداخبيت نوهباكم نتبثج أو إزانت مكناث الجهاز

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 过培 且具有 格的人 才能 行此 的安 、更 和 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.

אזהרה!

צוות מוסמך בלבד רשאי להתקין, להחליפן או לתחזק את הציוד או לחתת שירות עבור הציוד.

يجب أن يسمح فقط للموظفي المؤهلين والمدربين لتركيب واستبدال أو خدمة هذا الجهاز

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。

警告

此部件 安 在限制 出的 所，限制 出的 所指只能通过使用特殊工具、和 钥匙或其它安全手段 出的 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.

אזרע עם גישה מוגבלת

אזהרה!
יש להתקין את היחידה באזוריים שיש בהם הגבלת גישה. הגישה ניתנת בעזרת כל אבטחה בלבד (מפתח, מנעול וכד.).

تم تخصيص هذه الأنبدة لتركيبها في مناطق ممنوعة.
يمكن انصسال إلى منطق ممنوعة فقط من خلال استخدام أداة خاصة
قد وفتح أو سُهّت أخرى بالمالما

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.

Redundant Power Supplies



Warning!

This unit might have more than one power supply connection. All connections must be removed to de-energize the unit.

冗長電源装置

このユニットは複数の電源装置が接続されている場合があります。

ユニットの電源を切るためには、すべての接続を取り外さなければなりません。

警告

此部件 接的 源可能不止一个，必 将所有 源断 才能停止 部件供 。

警告

此裝置連接的電源可能不只一個，必須切斷所有電源才能停止對該裝置的供電。

Warnung

Dieses Gerät kann mehr als eine Stromzufuhr haben. Um sicherzustellen, dass der Einheit kein Strom zugeführt wird, müssen alle Verbindungen entfernt werden.

¡Advertencia!

Puede que esta unidad tenga más de una conexión para fuentes de alimentación. Para cortar por completo el suministro de energía, deben desconectarse todas las conexiones.

Attention

Cette unité peut avoir plus d'une connexion d'alimentation. Pour supprimer toute tension et tout courant électrique de l'unité, toutes les connexions d'alimentation doivent être débranchées.

אם קיימים יותר מספק אחד

אזהרה !

ליחידה יש יותר מחיבור אחד של ספק. יש להסיר את כל החיבורים על מנת לרוקן את היחידה.

يجب إزالة كافة الاتصالات لعزل الوحدة عن الكهرباء قد يكون
لهذا الجهاز عدة اتصالات بوحدات إمداد الطاقة.
경고!

이 장치에는 한 개 이상의 전원 공급 단자가 연결되어 있을 수 있습니다. 이 장치에 전원을 차단하기 위해서는 모든 연결 단자를 제거해야만 합니다.

Waarschuwing

Backplane Voltage



Warning!

Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.

バックプレーンの電圧

システムの稼働中は危険な電圧または電力が バックプレーン上にかかりています。

修理する際には注意ください。

警告

当系 正在 行时，背板上有很危 的 压或能量， 行 修时 必小心。

警告

當系統正在進行時，背板上有危險的電壓或能量，進行維修時務必小心。

Warnung

Wenn das System in Betrieb ist, treten auf der Rückwandplatine gefährliche Spannungen oder Energien auf.
Vorsicht bei der Wartung.

¡Advertencia!

Cuando el sistema está en funcionamiento, el voltaje del plano trasero es peligroso. Tenga cuidado cuando lo revise.

Attention

Lorsque le système est en fonctionnement, des tensions électriques circulent sur le fond de panier. Prendre des précautions lors de la maintenance.

מתוח בפנل האחורי

אזהרה!
קיימת סכנת מתוח בפנל האחורי בזמן תפעול המערכת. יש להיזהר במהלך העבודה.

خطر منه التيار الكهربائي أو الطاقة المجددة على اللوحة النظام يعمل كهذا حذرا
عند خدمة هذا الجهاز هناك عندما يكون

경고!

시스템이 동작 중일 때 후면판 (Backplane)에는 위험한 전압이나 에너지가 발생 합니다. 서비스 작업 시 주의하십시오.

Waarschuwing

Een gevaarlijke spanning of energie is aanwezig op de backplane wanneer het systeem in gebruik is. Voorzichtigheid is geboden tijdens het onderhoud.

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

安 必 符合本地与本国 气法 。

警告

Warnung

Die Installation der Geräte muss den Sicherheitsstandards entsprechen.

¡Advertencia!

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

Attention

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

תיאום חוקי החשמל הארצי

!אזהרה!

התקנות הצדור חייבות להיות תואמת לחוקי החשמל המקומיים והלאומיים.

تركيب المعدات الكهربائية يجب أن يمتهن القاريء المحلي والطبية المتعلقة

بـ الكهرباء

경고!

현 지역 및 국가의 전기 규정에 따라 장비를 설치해야 합니다.

Waarschuwing

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 品的 弃处理 根据所有国家的法律和 章 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.

סילוק המזcod

!אזהרה

סילוק סופי של מוצר זה חייב להיות בהתאם להנחיות וחוקי המדינה.

عند التخلص النهائي من هذا المنتج ينبغي التعامل معه وفقاً لجميع القوانين واللائح الوطنية

경고!

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

Hot Swap Fan Warning

Waarschuwing

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



Warning!

The fans might still be turning when you remove the fan assembly from the chassis. Keep fingers, screwdrivers, and other objects away from the openings in the fan assembly's housing.

ファン・ホットスワップの警告

シャーシから冷却ファン装置を取り外した際、ファンがまだ回転している可能性があります。ファンの開口部に 指 ドライバー およびその他のものを近づけないで下さい。

警告

当您从机架移除 扇 置， 扇可能仍在 动。小心不要将手指、螺 起子和其他物品太靠近 扇

警告

當您從機架移除風扇裝置，風扇可能仍在轉動。小心不要將手指、螺絲起子和其他物品太靠近風扇。

Warnung

Die Lüfter drehen sich u. U. noch, wenn die Lüfterbaugruppe aus dem Chassis genommen wird. Halten Sie Finger, Schraubendreher und andere Gegenstände von den Öffnungen des Lüftergehäuses entfernt.

¡Advertencia!

Los ventiladores podran dar vuelta cuando usted quite ell montaje del ventilador del chasis. Mandtenga los dedos, los destornilladores y todos los objetos lejos de las aberturas del ventilador

Attention

Il est possible que les ventilateurs soient toujours en rotation lorsque vous retirerez le bloc ventilateur du châssis. Prenez garde à ce que doigts, tournevis et autres objets soient éloignés du logement du bloc ventilateur.

אזהרה!

כאשר מסירים את חלקו המאוחר מהארז, יתכן והמאחוררים עדיין עובדים. יש להרוחיק למרחק בטוח את האצבעות וכלי עבודה שונים מהפתחים בתחום המאוחר

مه انمكه أن انمر اوح ال تسال تدور عند إزانة كتلة ان مروحة مه انهيكم يجب إبقاء
الأصابع وملفات انبراغي
وغيرها مه الشيء بعيدا عنه انفتحت في كتلة ان مروحة

경고!

새시로부터 팬 조립품을 제거할 때 팬은 여전히 회전하고 있을 수 있습니다. 팬 조립품 외관의 열려있는 부분들로부터 손가락 및 스크류드라이버, 다른 물체들이 가까이 하지 않도록 배치해 주십시오.

Waarschuwing

Het is mogelijk dat de ventilator nog draait tijdens het verwijderen van het ventilatorsamenstel uit het chassis. Houd uw vingers, schroevendraaiers en eventuele andere voorwerpen uit de buurt van de openingen in de ventilatorbehuizing.

Power Cable and AC Adapter



Warning!

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 Pulse Secure 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

安此品时，使用本身提供的或指定的接，源和源适配器. 使用其它材或适配器可能会引起故障或火灾。除了Pulse Secure 所指定的品，气用品和材料安全法律 定禁止使用未 UL或CSA 的材。(材上会示UL/CSA符号)。

警告

安装此产品时,请使用本身提供的或指定的连接线,电源线和电源适配器. 使用其它线材或适配器可能会引起故障或火灾。除了Pulse Secure 所指定的产品,电电气用品和材料安全法律规定禁止使用未经UL或CSA认证的线材。(线材上会显示UL/CSA符号)。

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 Pulse Secure 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 Pulse Secure 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 Pulse Secure seulement.

!אזהרה!

אשר לשם AC מתקנים את המזctr, יש להשתמש בכבלים, ספקים ומתחמים כן. שימוש בכל כבל או מתאם אחר יכול לגרום לתקלה או כאשר על פי חוקי שימוש במכשרי חשמל וחוקי בטיחות, קיים איסור נועד וטופקו קצר חשמלי. או ב UL - להשתמש בכבלים המוסמכים ב כשאר מופיע עליהם קוד של CSA. עבור כל מזctr חשמלי אחר שלא צוין על ידי סופרמייקרו בלבד (UL/CSA).

عند تركيب الجهاز يجب استخدام كابلات التوصيل، والكابلات الكهربائية
ومحولات التيار المتردد
التي . أن استخدام أي كابلات ومحولات أخرى يتسبب في حدوث عطل أو حريق.
تم توفيرها لك مع المنتج
الأجهزة الكهربائية ومواد قانون السلامة يحظر استخدام الكابلات UL أو CSA
معتمدة من قبل
لأي أجهزة كهربائية أخرى غير المنتجات المعينة من قبل
Pulse Secure (التي تحمل علامة UL/CSA)

경고!

제품을 설치할 때에는 제공되거나 지정된 연결케이블과 전원케이블, AC어댑터를 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 CSA에서 인증한 케이블(전선 위에 UL/CSA가 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 Pulse Secure alleen.

Certification Statements

Japan

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。VCCI-A

Israel

אזהרה
 מוצר זה הוא מוצר Class A.
 בסביבה ביתית, מוצר זה עלול לגרום הפרעות בתדר רדיו, ובמקרה זה, המשתמש עשוי להידרש לנקוט אמצעים מתאימים.

Saudi Arabia

Complies with the CITC Technical Specification CITC GEN001, IT001.

South Korea

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Thailand

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