

Hybrid Mesh Network Security

16 April 2026

SMART-1 7000-L SECURITY MANAGEMENT APPLIANCES

SM-CP-7L10-1

Getting Started Guide

CHECK POINT™

Check Point Copyright Notice

© 2025 Check Point Software Technologies Ltd.

All rights reserved. This product and related documentation are protected by copyright and distributed under licensing restricting their use, copying, distribution, and decompilation. No part of this product or related documentation may be reproduced in any form or by any means without prior written authorization of Check Point. While every precaution has been taken in the preparation of this book, Check Point assumes no responsibility for errors or omissions. This publication and features described herein are subject to change without notice.

RESTRICTED RIGHTS LEGEND:

Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 and FAR 52.227-19.

TRADEMARKS:

Refer to the Copyright page for a list of our trademarks.

Refer to the Third Party copyright notices for a list of relevant copyrights and third-party licenses.

Important Information



Latest Software

We recommend that you install the most recent software release to stay up-to-date with the latest functional improvements, stability fixes, security enhancements and protection against new and evolving attacks.



Certifications

For third party independent certification of Check Point products, see the Check Point Certifications page.



Check Point Smart-1 7000-L Security Management Appliances Getting Started Guide

For more about this release, see the home page.



Latest Version of this Document in English

Open the latest version of this document in a Web browser.
Download the latest version of this document in PDF format.



Feedback

Check Point is engaged in a continuous effort to improve its documentation.
Please help us by sending your comments.

Revision History

Date	Description
7 Dec 2025	Updated *"Shipping Carton Contents" on page 36*
28 Oct 2025	Updated *"Declaration of Conformity" on page 31*
21 Oct 2025	Updated *"Shipping Carton Contents" on page 36*
10 June 2025	Improved formatting and layout
27 May 2025	First release of this document

Table of Contents

Safety, Environmental, and Electronic Emissions Notices ... *7*

Sicherheits-, Umwelt- und EMV-Hinweise ... *15*

Remarques relatives à la sécurité, l'environnement et les émissions électroniques ... *23*

Declaration of Conformity ... *31*

Welcome ... *34*

Smart-1 7000-L Overview ... *35*

Shipping Carton Contents ... *36*

Mounting the Appliances in a Rack ... *37*

Appliance Specifications - Smart-1 7000-L ... *37*

Appliance Air Vents - Smart-1 7000-L ... *37*

Configuring Smart-1 Appliances ... *39*

Starting the Appliance ... *39*

Available Software Images ... *39*

Initial Configuration ... *39*

Connecting to the Appliance CLI ... *39*

Smart-1 7000-L Appliance Hardware ... *40*

Front Panel ... *40*

Front Panel Ports ... *42*

Front Panel 1G Port LEDs ... *43*

Front Panel System LEDs ... *44*

Front Panel On-board Port LEDs ... *45*

Rear Panel ... *46*

Grounding the Appliance ... *47*

Cooling Fan Units Naming Convention ... *49*

Installing the Power Cable Restraint ... *49*

Lights Out Management ... *51*

Dual Redundant BIOS ... *51*

PSU Configuration and Monitoring ... 52
DC Power Connections ... 54
AC Power Cords ... 55
Replacing and Upgrading Components ... 57
RAID Configuration ... **58**
Restoring Factory Defaults ... **59**
Restoring in Gaia Portal ... 59
Restoring from the Boot Menu ... 59
Restoring in Gaia Clish ... 60
Support ... **61**

Safety, Environmental, and Electronic Emissions Notices

Read the following warnings before setting up or using the appliance.

Warning - Do not block air vents. A minimum 1/2-inch clearance is required.

Warning - Many components described in this document can be damaged by Electrostatic Discharge (ESD). Follow the precautions described here and before specific procedures detailed in the document to protect static-sensitive components from ESD-related damage.



The machine can only be used in a restricted access location and must be installed and maintained by a skilled person.

The device can only be used in a fixed location such as a lab or a machine/server room. When you install the device, ensure that the protective earthing connection of the socket-outlet is verified by a skilled person.

Before you install or remove a chassis, or work near power supplies, turn off the power and unplug the power cord.

To prevent damage to any system board, it is important to handle it with care. The following measures are generally sufficient to protect your equipment from static electricity discharge:

- This equipment must be grounded.
- Disconnect the system board power supply from its power source before you connect or disconnect cables or install or remove any system board components. Failure to do this can result in personnel injury or equipment damage.
- When handling the board, use a grounded wrist strap designed for static discharge elimination.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Handle the board by its edges only. Do not touch its components, peripheral chips, memory modules or gold contacts.
- When handling memory modules, avoid touching the gold edge fingers.
- Restore the communications appliance system board and peripherals back into the antistatic bag when they are not in use or not installed in the chassis. Some circuitry on the system board can continue operating even though the power is switched off.
- Class 1 laser product warning - A totally enclosed laser system containing a class 1 laser.
- Product shall be used with Class 1 laser device modules.

This device is not intended for use in the direct field of view at visual display workplaces. To avoid incommoding reflexions at visual display workplaces this device must not be placed in the direct field of view.

Lithium Battery Caution

- There is a risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the manufacturer's instructions.
- Installation only by a skilled person who knows all Installation and Device Specifications which are to be applied.
- Please conform to your local laws and regulations regarding safe disposal of lithium battery.
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.
- Avoid short-circuiting the lithium battery; this can cause it to superheat and cause burns if touched.

Warning - DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
DO NOT DISASSEMBLE IT OR ATTEMPT TO RECHARGE IT OUTSIDE THE SYSTEM.

Warning - Class I Equipment. This equipment must be earthed. The power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts.

Electrical Safety Instructions

Before turning on the device, ground the grounding cable of the equipment. Proper grounding is very important to protect the equipment against the harmful effects of external noise and to reduce the risk of electrocution in the event of a lightning strike. To uninstall the equipment, disconnect the ground wire after turning off the power. A ground wire is required and the part connecting the conductor must be greater than 6 AWG.



ITE Room Warning

Suitable for installation in Information Technology Rooms in accordance with Article 645 of the National Electrical Code and NFPA 75.

Rack Mount Instructions

The following or similar rack-mount instructions are included with the installation instructions:

1. Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature specified by the manufacturer.
2. 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.
3. Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
4. 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. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
5. Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

For California:

Perchlorate Material - special handling may apply. See http://www.dtsc.ca.gov/hazardouswaste/perchlorate

The foregoing notice is provided in accordance with California Code of Regulations Title 22, Division 4.5, Chapter 33. Best Management Practices for Perchlorate Materials. This product, part, or both may include a lithium manganese dioxide battery which contains a perchlorate substance.

Proposition 65 Chemical

Chemicals identified by the State of California, pursuant to the requirements of the California Safe Drinking Water and Toxic Enforcement Act of 1986, California Health & Safety Code s. 25249.5, et seq. ("Proposition 65"), that is "known to the State to cause cancer or reproductive toxicity" (see http://www.calepa.ca.gov)

WARNING:

Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling.

Caution!

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

This equipment 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.

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

Information to user:

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

CE (European Union (EU) Electromagnetic Compatibility Directive)

This device is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive (2014/30/EU).

The above product conforms with Low Voltage Directive 2014/35/EU and complies with the requirements relating to electrical equipment designed for use within certain voltage limits.

Federal Communications Commission (FCC) statement for a Class A digital device or peripheral

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 in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit that is different from the one to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ICES (Canadian Department Compliance Statement)

This Class A digital apparatus complies with Canadian ICES-003.

VCCI Compliance Statement

This section provides the compliance statement for the Voluntary Control Council for Interference by Information Technology Equipment (VCCI), which governs radio frequency emissions in 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

BSMI Taiwan Statement

警告：為避免電磁干擾，本產品不應安裝或使用於住宅環境。



Product Disposal

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office or your household waste disposal service.

Sicherheits-, Umwelt- und EMV-Hinweise

Lesen Sie die folgenden Warnhinweise durch, bevor Sie das Gerät einrichten oder verwenden.

- **Achtung** - Halten Sie die Belüftungsöffnungen frei. Es ist ein Mindestabstand von 1,3 cm einzuhalten.
- **Achtung** - Viele in diesem Dokument beschriebene Komponenten können durch elektrostatische Entladung (ESD) beschädigt werden. Befolgen Sie die hier beschriebenen Vorsichtsmaßnahmen und vor bestimmten Verfahren, die in dem Dokument beschrieben werden, um elektrostatisch empfindliche Komponenten vor ESD-bedingten Schäden zu schützen.



Das Gerät darf nur an einem Ort mit beschränktem Zugang verwendet werden und muss von einer fachkundigen Person installiert und gewartet werden.

Das Gerät kann nur an einem festen Standort verwendet werden, z. B. in einem Labor oder einem Maschinen-/Serverraum. Wenn Sie das Gerät installieren, achten Sie darauf, dass die Schutzerdung der Steckdose von einer fachkundigen Person überprüft wird.

Bevor Sie ein Gehäuse aufsetzen oder entfernen oder in der Nähe einer Stromquelle arbeiten, schalten Sie den Strom aus und ziehen Sie das Netzkabel ab.

Um Beschädigungen der Systemplatine zu vermeiden, müssen Sie diese mit Vorsicht behandeln. Die folgenden Maßnahmen sind im Allgemeinen ausreichend, um Ihre Geräte vor statischen Entladungen zu schützen:

- Dieses Gerät muss geerdet werden.
- Trennen Sie das Netzteil der Systemplatine von der Stromversorgung, bevor Sie Kabel anschließen oder trennen oder Systemplatinenkomponenten installieren oder entfernen. Bei Zuwiderhandeln besteht Verletzungsgefahr und die Gefahr von Sachschäden am Gerät.
- Tragen Sie beim Umgang mit der Platine eine Erdungsmanschette, die zur Vermeidung statischer Entladungen entwickelt wurde.
- Fassen Sie vor dem Entnehmen der Platine aus der antistatischen Verpackung einen geerdeten Metallgegenstand an.
- Berühren Sie die Platine nur an den Kanten. Berühren Sie keine Komponenten der Platine, Peripheriebaugruppen, Speichermodule oder goldenen Kontakte.
- Vermeiden Sie beim Umgang mit Speichermodulen die Berührung der goldenen Kontakte.
- Verwahren Sie die Systemplatine des Kommunikationsgeräts und die Peripheriemodule wieder in der antistatischen Verpackung, wenn sie nicht benutzt oder in das Gehäuse eingebaut werden. Einige Schaltkreise auf der Systemplatine bleiben möglicherweise auch nach dem Ausschalten der Stromversorgung in Betrieb.
- Laserproduktwarnung Klasse 1 - Dieses vollständig geschlossene Lasersystem enthält einen Laser der Klasse 1.
- Das Produkt muss mit Lasermodulen der Klasse 1 verwendet werden.

Das Gerät ist nicht zur Verwendung im direkten Blickfeld von Arbeitsplätzen mit visueller Anzeige vorgesehen. Um störende Reflexionen an Arbeitsplätzen mit visueller Anzeige zu vermeiden, darf das Gerät nicht im direkten Blickfeld platziert werden.

Sicherheitshinweise Lithiumbatterien

- Es besteht Explosionsgefahr, wenn die Batterie durch einen falschen Typ ersetzt wird.
- GEBRAUCHTE BATTERIEN SIND DEN HERSTELLERANWEISUNGEN ENTSPRECHEND ZU ENTSORGEN.
- Installation nur durch eine fachkundige Person, die alle einzuhaltenden Installations- und Gerätespezifikationen kennt.
- Bitte beachten Sie die örtlichen Gesetze und Vorschriften zur sicheren Entsorgung von Lithiumbatterien.
- Die Entsorgung einer Batterie in Feuer oder einem heißen Ofen oder die mechanische Zerkleinerung oder das Zerschneiden einer Batterie kann zu einer Explosion führen.
- Das Aufbewahren einer Batterie in einer Umgebung mit extrem hohen Temperaturen kann zu einer Explosion oder zum Auslaufen von entflammbarer Flüssigkeit oder Gas führen.
- Eine extrem niedrigem Luftdruck ausgesetzte Batterie kann zu einer Explosion oder zum Auslaufen von entflammbarer Flüssigkeit oder Gas führen.
- Vermeiden Sie einen Kurzschluss der Lithiumbatterie. Sie könnte sonst überhitzen und bei Berührung Verbrennungen verursachen.

Achtung - WENN DIE BATTERIE NICHT ORDNUNGSGEMÄSS AUSGETAUSCHT WIRD, BESTEHT EXPLOSIONSGEFAHR. NUR GEGEN EINE GLEICHE BATTERIE ODER EINEN GLEICHWERTIGEN BATTERIETYP GEMÄSS HERSTELLEREMPFEHLUNG AUSTAUSCHEN. GEBRAUCHTE BATTERIEN SIND DEN HERSTELLERANWEISUNGEN ENTSPRECHEND ZU ENTSORGEN. ZERLEGEN SIE ES NICHT UND VERSUCHEN SIE NICHT, ES AUSSERHALB DES SYSTEMS AUFZULADEN.

Warnung - Geräte der Klasse I. Dieses Gerät muss geerdet sein. Der Netzstecker muss an eine ordnungsgemäß installierte Schutzkontaktsteckdose angeschlossen werden. Eine unsachgemäß installierte Steckdose kann gefährliche Spannungen auf zugängliche Metallteile übertragen.

Sicherheitshinweise Elektrik

Erden Sie vor dem Einschalten des Geräts das Erdungskabel des Geräts. Eine ordnungsgemäße Erdung ist sehr wichtig, um das Gerät vor schädlichen Einflüssen durch externe Störungen zu schützen und das Risiko eines Stromschlags im Falle eines Blitzschlags zu verringern. Um das Gerät zu deinstallieren, trennen Sie den Erdungsdraht nach dem Ausschalten der Stromversorgung ab. Ein Erdungsdraht ist erforderlich, und der Teil, der den Leiter verbindet, muss größer als 6 AWG sein.



Warnung IT-Raum

Geeignet für die Installation in IT-Räumen in Übereinstimmung mit Artikel 645 des National Electrical Code und NFPA 75.

Anweisungen zur Rackmontage

Die folgenden oder ähnliche Anweisungen zur Rackmontage sind in den Installationsanweisungen enthalten:

1. Erhöhte Betriebstemperatur - Bei Installation in einer geschlossenen oder Mehrfachgeräte-Rack-Baugruppe kann die Betriebsumgebungstemperatur der Rackumgebung höher als die Raumtemperatur sein. Deshalb sollte darauf geachtet werden, das Gerät in einer Umgebung zu installieren, die kompatibel zu der vom Hersteller angegebenen maximalen Umgebungstemperatur ist.
2. Reduzierter Luftstrom - Die Installation des Geräts in einem Rack sollte so erfolgen, dass die Luftstrommenge, die für den sicheren Betrieb des Geräts erforderlich ist, nicht beeinträchtigt wird.
3. Mechanische Belastung - Die Montage des Geräts im Rack sollte so erfolgen, dass bei einer ungleichmäßigen mechanischen Belastung keine gefährliche Betriebsbedingung entstehen kann.
4. Stromkreisüberlastung - Der Anschluss des Geräts an den Speisestromkreis und die Wirkung, die ein Überlasten der Stromkreise auf das Überstromschutz-Gerät und die Speisestromkreisverkabelung haben kann, sollten sorgfältig geprüft und berücksichtigt werden. Beim Berücksichtigen dieses Aspekts sollten die Lastangaben auf dem Leistungsschild des Geräts sorgfältig geprüft werden.
5. Zuverlässige Erdung - Ausrüstung, die in Racks montiert ist, muss zuverlässig geerdet sein. Besonders müssen hierbei die Stromanschlussleitungen und weniger die direkten Verbindungen zum Abzweigstromkreis beachtet werden (z. B. durch die Verwendung von Adapterleisten).

Für Kalifornien:

Perchlorate - möglicherweise ist eine spezielle Handhabung erforderlich. Siehe http://www.dtsc.ca.gov/hazardouswaste/perchlorate

Der vorangestellte Hinweis erfolgt in Übereinstimmung mit dem California Code of Regulations Title 22, Division 4.5, Chapter 33. Bewährte Praktiken für den Umgang mit Perchloraten. Dieses Produkt oder Bestandteile dieses Produkts enthalten möglicherweise eine Lithium-Mangandioxid-Batterie, in der Perchlorate enthalten sind.

Proposition 65-Chemikalie

Chemikalien, die vom Bundesstaat Kalifornien laut den Anforderungen des California Safe Drinking Water and Toxic Enforcement Act of 1986, California Health & Safety Code s. 25249.5 ff. („Proposition 65“) als „nach Kenntnis der Regierung krebserregend oder reproduktionstoxisch“ ausgewiesen sind (siehe http://www.calepa.ca.gov)

ACHTUNG:

Beim Umgang mit dem Kabel an diesem Produkt kommen Sie mit Blei in Kontakt. Diese Chemikalie ist dem Bundesstaat Kalifornien als Verursacher von Krebs, Geburtsschäden oder anderen Fortpflanzungsschäden bekannt. Nach der Berührung die Hände waschen.

Vorsicht!

Sämtliche Änderungen oder Modifikationen, die nicht ausdrücklich in der Garantieerklärung dieses Geräts gestattet werden, führen möglicherweise zum Erlöschen der Betriebserlaubnis des Benutzers.

Dieses Gerät ist mit Part 15 der FCC Rules konform. Der Betrieb ist unter den folgenden zwei Bedingungen zulässig: (1) Das Gerät darf keine schädlichen Interferenzen verursachen und (2) das Gerät muss jede Art von Interferenz, selbst wenn diese Betriebsstörungen verursachen können, tolerieren können.

Vorsicht!

Der Hersteller übernimmt keine Verantwortung für Radio- oder Fernsehsignalstörungen, die durch nicht genehmigte Modifikationen des Geräts auftreten. Derartige Modifikationen könnten zum Erlöschen der Betriebserlaubnis des Benutzers führen.

Informationen für den Benutzer:

Das Betriebshandbuch oder die Bedienungsanleitung eines Geräts mit beabsichtigter oder nicht beabsichtigter Strahlungsquelle muss einen Warnhinweis für den Benutzer enthalten, dass Änderungen oder Modifikationen, die nicht ausdrücklich von der für die Normenkonformität zuständigen Partei gestattet werden, möglicherweise zum Erlöschen der Betriebserlaubnis des Benutzers führen. Sofern das Handbuch nur in einer papierlosen Form, z. B. auf einer CD-ROM oder über das Internet, bereitgestellt wird, können die diesem Abschnitt zufolge erforderlichen Informationen in dieser alternativen Form in das Handbuch aufgenommen werden, sofern angemessen davon ausgegangen werden kann, dass der Benutzer auf die Informationen in dieser Form zugreifen kann.

CE (Richtlinie der Europäischen Union (EU) bezüglich elektromagnetischer Verträglichkeit)

Hiermit wird erklärt, dass dieses Gerät mit den Auflagen der Richtlinie des Europäischen Rates bezüglich zur der Angleichung der Rechtsvorschriften der Mitgliedstaaten im Hinblick auf die Richtlinie über elektromagnetische Verträglichkeit (2014/30/EU) konform ist.

Das genannte Produkt ist mit der Niederspannungsrichtlinie (2014/35/EU) konform und erfüllt die Auflagen betreffend elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen.

Erklärung gemäß Federal Communications Commission (FCC) für ein digitales Gerät oder Peripheriegerät der Klasse A

Dieses Gerät wurde geprüft und als mit den ein digitales Gerät der Klasse A gemäß Part 15 der FCC Rules geltenden Grenzwerten konform befunden. Die Grenzwerte sollen einen angemessenen Schutz gegen schädliche Interferenzen durch Anlagen in Wohnräumen bieten. Dieses Gerät generiert und verwendet Hochfrequenzenergie, kann Hochfrequenzenergie abstrahlen und, wenn es nicht gemäß den Anweisungen installiert und verwendet wird, Störungen in der Funkkommunikation verursachen. Es wird jedoch nicht garantiert, dass bei einer bestimmten Installation keine Störungen auftreten. Wenn dieses Gerät den Radio- oder Fernsehempfang stört, was durch Aus- und Einschalten des Geräts festgestellt werden kann, sollte der Benutzer versuchen, die Störung durch eine oder mehrere der folgenden Maßnahmen zu beheben:

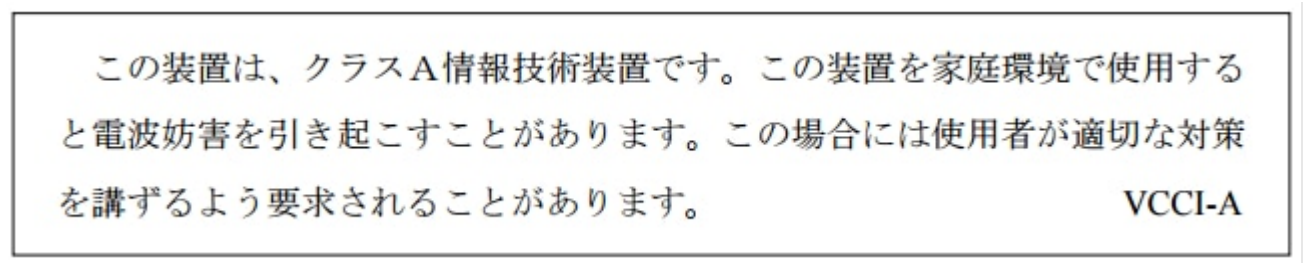
- Neuausrichten oder Umpositionieren der Empfangsantenne.
- Vergrößern des Abstands zwischen Gerät und Empfänger.
- Anschließen des Geräts an einen anderen Stromkreis als den, an den der Empfänger angeschlossen ist.
- Lassen Sie sich vom Händler oder einem erfahrenen Radio- bzw. Fernsehtechniker beraten.

ICES (Konformitätserklärung Kanada)

Dieses digitale Gerät der Klasse A ist mit der kanadischen Richtlinie ICES-003 konform.

VCCI-Konformitätserklärung

Dieser Absatz umfasst die Konformitätserklärung für den Voluntary Control Council for Interference by Information Technology Equipment (VCCI), der die Funkwellenemissionen in Japan regelt.





Produktentsorgung

Dieses Symbol auf dem Produkt oder dessen Verpackung gibt an, dass dieses Produkt nicht zusammen mit dem Hausmüll entsorgt werden darf. Es obliegt Ihrer Verantwortung, das Gerät an einer entsprechenden Stelle für die Entsorgung oder Wiederverwertung von Elektrogeräten aller Art abzugeben. Die separate Sammlung und das Recyceln Ihrer alten Elektrogeräte zum Zeitpunkt ihrer Entsorgung trägt zum Schutz der natürlichen Ressourcen bei und gewährleistet, dass Sie auf eine Art und Weise verwertet werden, die keine Gefährdung für die Gesundheit von Mensch und Umwelt darstellt. Weitere Informationen darüber, wo Sie alte Elektrogeräte zum Recyceln abgeben können, erhalten sie bei den örtlichen Behörden oder dem für Sie zuständigen Abfallwirtschaftsunternehmen.

Remarques relatives à la sécurité, l'environnement et les émissions électroniques

Avant de mettre en place ou d'utiliser l'appareil, veuillez lire les avertissements suivants.

- **Avertissement** : ne pas obturer les aérations. Il faut laisser au moins 1,27 cm d'espace libre.
- **Avertissement** - Un grand nombre des composants décrits dans ce document peuvent être endommagés par Décharge Électrostatique (ESD). Veuillez respecter les précautions décrites ici et avant toute procédure spécifique détaillée dans ce document afin de protéger les composants sensibles à électricité statique contre tout dommage par ESD.



La machine ne peut être utilisée que dans un endroit à accès restreint et doit être installée et entretenue par une personne qualifiée.

L’appareil ne peut être utilisé que dans un endroit fixe tel qu’un laboratoire ou une salle de machines/serveurs. Lors de l’installation de l’appareil, assurez-vous que la connexion de mise à la terre de protection de la prise de courant est vérifiée par une personne qualifiée.

Avant d'installer ou retirer un châssis ou de travailler à proximité d'alimentations, mettez-le hors tension et débranchez le cordon d'alimentation.

Pour éviter d'endommager les cartes système, il est important de les manipuler avec soin. Les mesures suivantes sont généralement suffisantes pour protéger votre équipement contre les décharges d'électricité statique :

- Cet équipement doit être mis à la terre.
- Débrancher l'alimentation de la carte système de sa source électrique avant de connecter ou déconnecter des câbles ou d'installer ou retirer des composants. À défaut, les risques sont d'endommager l'équipement et de causer des blessures corporelles.
- Avant de manipuler la carte, portez aux poignet un bracelet antistatique relié à la terre.
- Touchez un objet métallique relié à la terre avant d'extraire la carte de son sachet antistatique.
- Ne tenez la carte que par ses bords. Ne touchez aucun composant, puce périphérique, module mémoire ou contact plaqué or.
- Lors de la manipulation des modules de mémoire, évitez de toucher les doigts dorés.
- Remettez dans leur sachet antistatique la carte système et les périphériques de l'appareil de communications lorsqu'ils ne sont pas utilisés ou installés dans le châssis. Certains circuits sur la carte système peuvent rester fonctionnels même si l'appareil est éteint.
- Produit laser de classe 1 : un système laser totalement clos et contenant un laser de classe 1.
- Le produit doit être utilisé avec des modules de dispositifs laser de classe 1.

Cet appareil n'est pas prévu pour être utilisé dans le champ de vision direct des personnes occupant un bureau. Pour éviter toute gêne occasionnée par un éventuel reflet, cet appareil ne doit pas être placé dans le champ de vision direct des personnes occupant un bureau.

Mise en garde concernant les batteries au lithium

- Un risque d'explosion existe si la batterie est remplacée par une autre de type incorrect.
- LES PILES DOIVENT ÊTRE MISES AU REBUT CONFORMÉMENT AUX INSTRUCTIONS DE LEUR FABRICANT.
- L'installation devra être effectuée uniquement par une personne qualifiée connaissant toutes les Spécifications concernant l'Installation et l'Appareil applicables.
- Veuillez respecter les lois et réglementations locales en matière de mise au rebut sécurisée des piles au lithium.
- Jeter une pile au feu ou dans un four chaud, l'écraser ou la couper peut causer une explosion.
- Laisser une pile dans un environnement de très haute température peut causer une explosion ou la fuite de gaz ou liquide inflammable.
- Laisser une pile dans un environnement de très basse pression peut causer une explosion ou la fuite de gaz ou liquide inflammable.
- Ne pas court-circuiter la pile au lithium : elle risque de surchauffer et de causer des brûlures en cas de contact.

Avertissement : DANGER D'EXPLOSION SI LA PILE EST MAL REPLACÉE. NE REMPLACER QU'AVEC UN TYPE IDENTIQUE OU ÉQUIVALENT, RECOMMANDÉ PAR LE CONSTRUCTEUR. LES PILES DOIVENT ÊTRE MISES AU REBUT CONFORMÉMENT AUX INSTRUCTIONS DE LEUR FABRICANT.
NE PAS LE DÉMONTER OU TENTER DE LE RECHARGER EN DEHORS DU SYSTÈME.

Avertissement - Équipement de Classe I. Cet équipement doit être mis à la terre. La fiche d'alimentation doit être connectée à une prise de terre correctement câblée. Une prise de courant mal câblée pourrait placer des tensions dangereuses sur des pièces métalliques accessibles.

Instructions de sécurité électrique

Avant d'allumer l'appareil, effectuez la mise à la terre avec le câble de terre. Une mise à la terre correcte est très importante pour protéger l'équipement contre les effets nocifs des bruits extérieurs et pour réduire le risque d'électrocution en cas de foudre. Pour désinstaller équipement, débrancher le câble de terre après avoir coupé le courant. Un câble de terre est obligatoire et la partie reliant le conducteur doit être supérieure à 6 AWG.



Avertissement chambres informatiques

Convient à une installation en Chambre Informatique conformément à l'Article 645 du National Electrical Code et au NFPA 75.

Instructions de montage en rack

Les instructions d'installation sont livrées avec les instructions de montage en rack ci-après (ou similaires) :

1. Fonctionnement à température plus élevée : si l'appareil est installé dans une armoire fermée ou un rack à plusieurs unités, la température du rack en fonctionnement peut être supérieure à la température ambiante de la pièce. Avant d'installer l'équipement, il faut donc s'assurer qu'il sera dans un environnement compatible avec la température ambiante maximale indiquée par le constructeur.
2. Circulation d'air réduite : l'installation dans un rack doit s'assurer de ne pas limiter la circulation de l'ai nécessaire au bon fonctionnement de l'équipement.
3. Charge mécanique : lors du montage de l'équipement dans le rack, il faut faire attention à ne pas déséquilibrer l'ensemble. Un rack se remplit en commençant par le bas.
4. Surcharge : pour la connexion de l'équipement au circuit électrique, il faut vérifier les risques de surcharge et les éventuelles conséquences sur la protection contre les surcourants et sur le câblage électrique. Dans ce contexte, il faut tenir compte des informations mentionnées par la plaque technique de l'instrument.
5. Mise à la terre : les équipements montés en rack doivent être en permanence reliés à un terre fiable. Il faut faire particulièrement attention aux branchements qui ne vont pas directement à la source électrique (par exemple des multiprises).

Pour la Californie :

Matériau perchloraté : manipulation spéciale potentiellement requise. Voir http://www.dtsc.ca.gov/hazardouswaste/perchlorate

L'avis suivant est fourni conformément au California Code of Regulations, titre 22, division 4.5, chapitre 33. Meilleures pratiques de manipulation des matériaux perchloratés. Ce produit, cette pièce ou les deux peuvent contenir une pile au dioxyde de lithium manganèse, qui contient une substance perchloratée.

Produits chimiques « Proposition 65 »

Les produits chimiques identifiés par l'état de Californie, conformément aux exigences du California Safe Drinking Water and Toxic Enforcement Act of 1986 du California Health & Safety Code s. 25249.5, et seq. (« Proposition 65 »), qui sont « connus par l'état pour être cancérigène ou être toxiques pour la reproduction » (voir http://www.calepa.ca.gov)

AVERTISSEMENT :

La manipulation de ce cordon vous expose au contact du plomb, un élément reconnue par l'état de Californie pour être cancérigène, provoquer des malformations à la naissance et autres dommages relatifs à la reproduction. Se laver les mains après toute manipulation.

Attention !

Toute modification non approuvée expressément par la garantie du présent appareil pourrait annuler le droit de l'utilisateur à faire fonctionner l'équipement.

Cet équipement est conforme à la section 15 des réglementations de la FCC. Son fonctionnement est soumis aux deux conditions suivantes : (1) Cet appareil ne doit pas causer d'interférence préjudiciable et (2) Cet appareil doit tolérer toute interférence reçue, y compris celles qui pourraient causer un fonctionnement indésirable.

Attention !

Le fabricant n'est pas responsable des éventuelles interférences radio ou TV dues à des modifications non autorisées du présent équipement. Ces modifications pourraient annuler le droit de l'utilisateur à faire fonctionner l'équipement.

Information à l'intention de l'utilisateur :

Le manuel utilisateur ou le manuel d'instruction d'un dispositif rayonnant (intentionnel ou non) doit avertir que toute modification non approuvée expressément par la partie responsable de la conformité peut annuler le droit de faire fonctionner l'équipement. Si le manuel n'est pas fourni sous forme imprimée (par exemple sur le disque d'un ordinateur ou via Internet), les informations requises par cette section doivent être incluses dans ces versions du manuel, sous réserve que l'utilisateur soit raisonnablement capable d'y accéder.

CE (Directive de l'Union européenne relative à la compatibilité électromagnétique)

Cet appareil est certifié conforme aux exigences de la directive du Conseil concernant le rapprochement des législations des États membres relatives à la directive sur la compatibilité électromagnétique (2014/30/UE).

Le produit ci-dessus est conforme à la directive basse tension 2014/35/UE et satisfait aux exigences relatives aux équipements électriques conçus pour être utilisés dans une certaine plage de tensions.

Déclaration de la Federal Communications Commission (FCC) pour un appareil ou périphérique numérique de classe A

Cet équipement a été testé et déclaré conforme aux limites pour appareils numériques de classe A, selon la section 15 des règlements de la FCC. Ces limitations sont conçues pour fournir une protection raisonnable contre les interférences nocives dans un environnement résidentiel. Cet appareil génère, et peut diffuser des fréquences radio et, dans le cas d'une installation et d'une utilisation non conformes aux instructions, il peut provoquer des interférences nuisibles aux communications radio. Cependant, il n'existe aucune garantie qu'aucune interférence ne se produira dans le cadre d'une installation particulière. Si cet appareil provoque des interférences avec un récepteur radio ou un téléviseur, ce qui peut être détecté en mettant l'appareil sous et hors tension, l'utilisateur peut essayer d'éliminer les interférences en suivant au moins l'une des procédures suivantes :

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'appareil et le récepteur.
- Brancher l'appareil sur une prise appartenant à un circuit différent de celui sur lequel est branché le récepteur.
- Consulter le distributeur ou un technicien radio/télévision qualifié pour obtenir de l'aide.

ICES (Déclaration de conformité du département canadien)

This Class A digital apparatus complies with Canadian ICES-003.

Déclaration de conformité VCCI

Cette section présente la déclaration de conformité du Voluntary Control Council for Interference (VCCI) concernant les équipements de technologie de l'information, qui régit les émissions de fréquence radio au Japon.

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



Mise au rebut du produit

Ce symbole apposé sur le produit ou son emballage signifie que le produit ne doit pas être mis au rebut avec les autres déchets ménagers. Il est de votre responsabilité de le porter à un centre de collecte désigné pour le recyclage des équipements électriques et électroniques. Le fait de séparer vos équipements lors de la mise au rebut, et de les recycler, contribue à préserver les ressources naturelles et s'assure qu'ils sont recyclés d'une façon qui protège la santé de l'homme et l'environnement. Pour obtenir plus d'informations sur les lieux où déposer vos équipements mis au rebut, veuillez contacter votre municipalité ou le service de gestion des déchets.

Declaration of Conformity

Name and address of the authorized trademark:	Check Point Software Technologies Ltd. 5 Shlomo Kaplan Street, Tel Aviv 6789159, Israel.
Brand name:	Check Point
Marketing models:	Smart-1 7000-L
Regulated models:	SM-CP-7L10-1
Manufacturer's name:	Check Point Software Technologies Ltd.
Manufacturer's address:	5 Shlomo Kaplan Street, Tel Aviv 6789159, Israel.
Date first applied:	January 2025

The models of the declaration described above have been assessed and found to be in compliance with the following harmonized standards, regulations, and technical references:

Category	Technical Specification	Description
EMC /EMI	**CE** Emission: EN 55032:2015/A1:2020, Class A BS EN 55032:2015+A1:2020 AS/NZS CISPR 32:2015 AMD 1:2020 EN 55032:2015/A1:2020, Class A BS EN 55032:2015+A1:2020 BS EN 55032:2015+A1:2020 AS/NZS CISPR 32:2015 AMD 1:2020 EN IEC 61000-3-2:2019/A1:2021 BS EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013/A2:2021/AC:2022-01 BS EN 61000-3-3:2013+A2:2021 Immunity: EN 55035:2017+A11:2020 IEC 61000-4-2 Ed. 2.0:2008 IEC 61000-4-3 Ed. 4.0:2020 IEC 61000-4-4 Ed. 3.0:2012 IEC 61000-4-5 Ed. 3.1:2017 IEC 61000-4-6 Ed. 5.0:2023 IEC 61000-4-8 Ed. 2.0:2009 IEC 61000-4-11 Ed. 3.0:2020	Electromagnetic Compatibility, Emissions requirements for information technology equipment Immunity characteristics. Limits and methods of measurement
	FCC/IC FCC CFR Title 47 Part 15 Subpart B:2023, Class A ICES-003 Issue 7:2020, Class A	Information Technology Equipment - Radio Disturbance Characteristics
	VCCI CISPR 32: 2016, Class A	Information Technology Equipment - Radio Disturbance Characteristics
	AS/NZS _RCM AS/NZS CISPR 32:2015 AMD 1:2020 EN 55032:2015/A1:2020, Class A	Information Technology Equipment - Radio Disturbance Characteristics

Category	Technical Specification	Description
Safety	CB IEC/EN 62368-1 2nd & 3rd Edition UL 62368-1, Second Edition.	Information technology equipment. Electrical Safety requirements, LVD
RoHS REACH	ROHS (Restriction of Hazardous Substances) re-cast directive 2011/65/EU and (EU)2015/863 amending Annex II REACH (Registration, Authorization and Restriction of Chemicals, EU Regulation (EC) 01907/2006	Restriction of Hazardous Substances
WEEE	Directive 2012/19/EU	Waste Electrical and Electronic Equipment

Testing labs	
DEKRA Testing and Certification Co., Ltd.	No. 85, Wenlin Street, Linkou Dist., New Taipei City TEL:+886-2-8601-3788 Info.tw@dekra.com http://www.dekra.com.tw
Prodigy Technology Consultant Co., Ltd.	No.12, Gong 7th Road, Linkou Dist., 24450, New Taipei City, Taiwan, R.O.C. TEL: +886-2-26020908 Certification@prodigy-tech.com.tw

Welcome

Thank you for choosing the Check Point Smart-1 7000-L Security Management Appliance, part of the Check Point Infinity consolidated architecture. We hope that you will be satisfied with this system and our support services. Check Point products are the most up to date and secure solutions available today.

Check Point also delivers worldwide educational, professional and support services through a network of Authorized Training Centers, Certified Support Partners and Check Point technical support personnel. We make sure that you get the most out of your security investment.

For more about the Internet Security Product Suite and other security solutions, see the Check Point Web site, or call Check Point at 1(800) 429-4391. For more technical information about Check Point products, consult the Check Point Support Center.

Welcome to the Check Point family. We look forward to meeting all of your current and future network, application and management security needs.

Smart-1 7000-L Overview

Check Point Smart-1 platforms welcome the 7th generation of Cyber Security. The Smart-1 7000-L dedicated appliances are designed for high performance and scalability. These platforms are built with advanced hardware and a resilient operating system, ensuring robust security from the core.

These appliances streamline the management of multiple security layers, enhancing policy efficiency and providing a unified security management experience through a single, user-friendly interface.

With centralized management, you can effortlessly manage all types of gateways—whether physical, virtual, or cloud-based—and correlate events across your entire network. The 7th generation Smart-1 appliances set a new standard for integrated Security Management, combining policy, logs, and events into one comprehensive solution.

Enjoy up to 40% improved performance over previous models with these new Smart-1 appliances, crafted to meet the needs of the most demanding environments with their ultra high-end capabilities.

Key Features:

- Achieve up to a 40% improvement in log collection with a sustained ingestion rate of up to 32,000 logs per second, ensuring industry-leading instantaneous search results.
- Benefit from optimized hardware and the latest R82 Software for enhanced performance.
- Easily double your system capacity in minutes by upgrading from the Base to the Plus package.
- Enjoy up to 64TB of storage capacity.
- Equipped with redundant storage and redundant power supplies.
- Access a comprehensive set of features and tools, including full threat visibility, best practices and compliance, SmartEvent, and Multi-Domain management and automation.
- Choose from a wide variety of storage and network interfaces, including copper and fiber options for 1GbE, 10GbE, 25GbE, 40GbE, and 100GbE.
- Manage up to 150 multiple Security Gateways simultaneously.

Shipping Carton Contents

Item	Description
Appliance	One Smart-1 7000-L appliance (rack mount ears and handles attached to the appliance)
Rails	■ Mounting Rails (for cabinets that support an adjustable rack depth of 22 inches to 32 inches) **Note** - If necessary, you can purchase mounting rails for larger cabinets (24 inches to 36 inches) as an optional accessory.
Doc Kit (Documentation)	■ Welcome Page ■ Before you begin
Accessories brown box	■ 1 x RJ45 Ethernet Cable CAT5e 1.8M ■ 1 x RJ45 to DB9P console cable ■ 1 x RJ45 Loopback connector ■ 1 x Fiber Optic Loopback connector ■ 2 x Power cables ■ 2 x PSU restraints ■ 2 x Ear mount brackets ■ 6 x Ear mount bracket screws (M4x4) ■ 2 x Extraction handles (for ear mount brackets) ■ 4 x Extraction handle screws (6#32x6)

Mounting the Appliances in a Rack

You can install your Smart-1 7000-L Appliance with the Telescopic Rails hardware. See *Rack Mounting for Check Point Appliances* for the procedure.

Appliance Specifications - Smart-1 7000-L

Smart-1 7000-L Specifications

Item	Value
Regulated Model	SM-CP-7L10-1
Width	438 mm
Depth	607.55 mm
Height	88.60 mm
Rack Units	2U
Maximum Operating Temperature	32°F - 104°F 0°C - 40°C
AC PSU Electrical Specifications	100 - 127VAC (12A), 200 - 240VAC (7.5A), 50 - 60Hz
DC PSU Electrical Specifications	From -48 to -60VDC (30.5A)

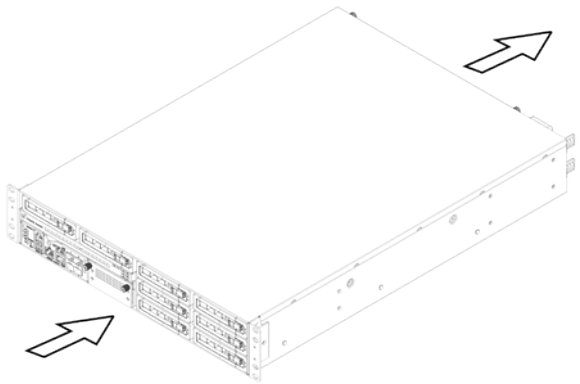
Appliance Air Vents - Smart-1 7000-L

When the appliance is mounted in a rack, make sure that the appliance air vents have sufficient airflow from front to rear.

Important - If the appliance vents are blocked, the appliance can become too hot and be damaged.

The appliance and rack rails were tested in extreme conditions and when properly installed do not block air flow to the appliance.

These appliances are specifically designed to install with the rails described in *Rack Mounting for Check Point Appliances*



Configuring Smart-1 Appliances

Starting the Appliance

Connect the appliance to a power source and turn on the appliance. When the appliance is ready, you can run the First Time Configuration Wizard to configure it.

To start the appliance:

1. Connect the appliance's management interface to a PC with the included Ethernet cable.
2. Connect both power cables to the power supply units in the rear panel.
3. If the power did not come up, press the **Power** button to power it up.
4. The appliance turns on.

When the appliance is ready, you can run the First Time Configuration Wizard to configure it.

Available Software Images

The Smart-1 7000-L Appliance comes with the R82 software image.

To follow the installation progress and see when the appliance is ready, connect to the appliance with a serial console cable.

For more about software images, see the Home Page sk182601.

Initial Configuration

Configure the appliance with the Gaia First Time Configuration Wizard. See the *Smart-1 7000-L / 7000-XL / 7000-UL Appliances Quick Start Guide*.

Connecting to the Appliance CLI

You can configure advanced options in the Gaia operating system in the command line.

To connect to the command line interface of the appliance, use one of these:

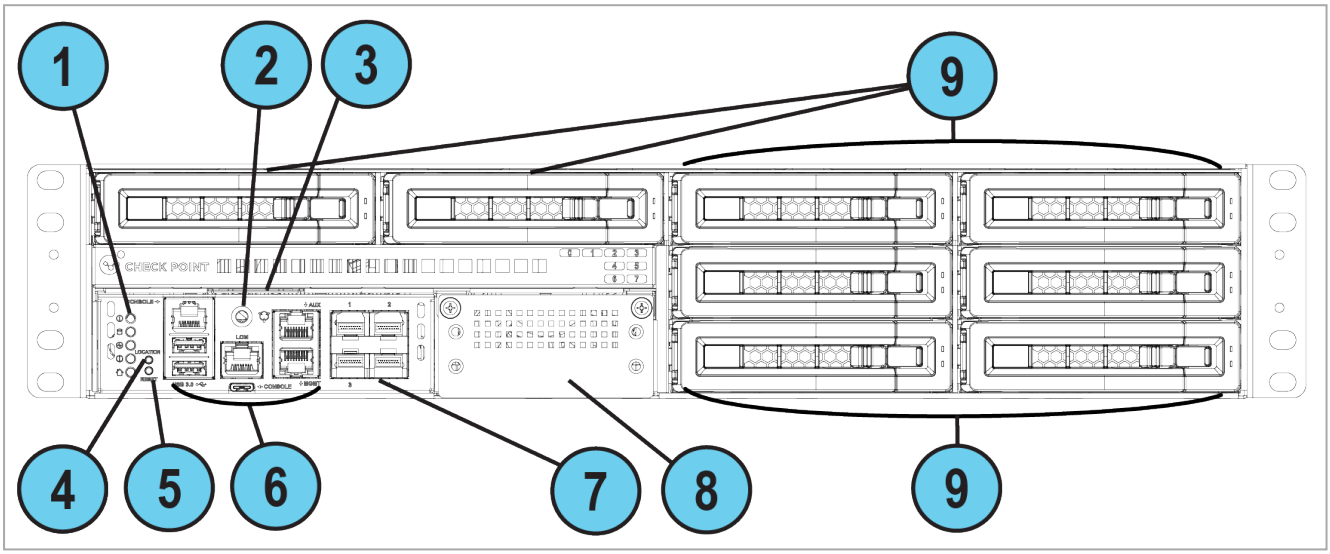
- The included serial console cable and terminal emulation software, such as PuTTY (from Windows) or Minicom (from Unix/Linux).

  Connection parameters for the appliances are: 9600 bps, 8 bits, no parity, 1 stop bit (8N1), Flow Control - None.

- An SSH connection to the management interface port (if SSHD is configured).

Smart-1 7000-L Appliance Hardware

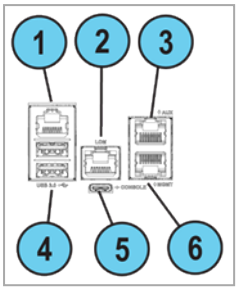
Front Panel



Item	Component	Description
1	System LEDs	See *"Front Panel System LEDs" on page 44*.
2	ESD grounding point	When you service the appliance, connect an ESD strap to this point.
3	Service tag	A slide-out card that identifies the appliance and shows its serial number and MAC address. It also contains a QR code that you can scan to view documentation.
4	Locator button	Turns the location beacon LED on and off in the appliance.
5	Reset	Insert a pin for 5 to 8 seconds to perform a hardware reset.
6	Appliance ports	See *"Front Panel Ports" on page 42* - Use these ports to connect to the appliance.

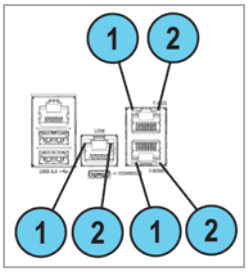
Item	Component	Description
7	On board 1/10G Fiber ports	In the Gaia OS, these ports are assigned the names from `eth1` to `eth4`. See *"Front Panel On-board Port LEDs" on page 45*.
8	Expansion line card	In the Gaia OS, the ports on this expansion line card are assigned the names `eth1-01`, `eth1-02`, and so on up to the last port. Port speeds for supported line cards are: 1/10/25/40/100G. For port speed and port activity LED descriptions, see the relevant chapter in *Installing and Removing Line Cards*
9	8 storage devices	Numbered from left to right: 0 to 3 top row, 4, 5 middle row, 6, 7 bottom row. ■ Activity LED (top LED on the storage device): • Off - No storage device activity • Blinking green - Storage device activity ■ Status LED (bottom LED on the storage device): • Off - Device is ready for insertion or removal • Steady green - Storage device is online • Flashes green twice per second - Identifying device • Blinks amber four times per second - Device failed • Blinks green slowly - Device is rebuilding

Front Panel Ports



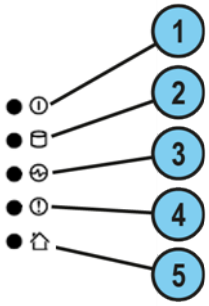
Item	Component	Description
1	Console RJ45 port	RJ45 port for a serial connection to the appliance.
2	LOM 1G port	LOM (Lights Out Management) port to connect to the LOM Card.
3	AUX RJ45 1G port	Ethernet port . In the Gaia OS, this port is assigned the name **AUX**.
4	USB 3.0 ports	Two USB 3.0 ports that are backwards compatible to USB 2.0.
5	Console USB Type-C port	USB Type-C port for a serial connection to the appliance.
6	RJ45 1G MGMT port	Management port to manage the Gaia Operating System on this appliance. In the Gaia OS, this port is assigned the name **Mgmt**.

Front Panel 1G Port LEDs



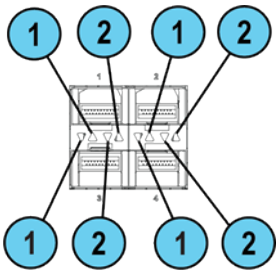
Item	Component	Description
1	Port activity LED	On the AUX, LOM, and MGMT ports: ■ Off - No activity ■ On (Green) - LAN link exists ■ Blinking (Green) - Activity
2	Link speed LED	On the AUX, LOM, and MGMT ports: ■ Off - 10 Mbit link ■ On (Green) - 100 Mbit link ■ On (Amber) - 1000 Mbit link

Front Panel System LEDs



Item	Icon	Component	Description
1		System power	■ Off - Appliance power is off ■ On (Green) - Appliance power is on
2		Storage device activity	■ Off - No storage device activity ■ On (Amber) - Read/write activity
3		Power supply status	■ Off - No power/no status ■ Amber - Power supply fault detected ■ Green - All power supplies are functioning correctly
4		Alert	■ Off - No faults were detected ■ Blinking red - System fault was detected
5		Location beacon	■ Off - Location beacon is turned off ■ Blinking blue - Location beacon is turned on in Gaia Portal, Gaia Clish, or by pressing the Locator button on the front panel You can turn on / off the Location Beacon LED in these ways: ■ With the Locator button on the front panel ■ With this Gaia Clish command: `set lcd location {on | off}`

Front Panel On-board Port LEDs

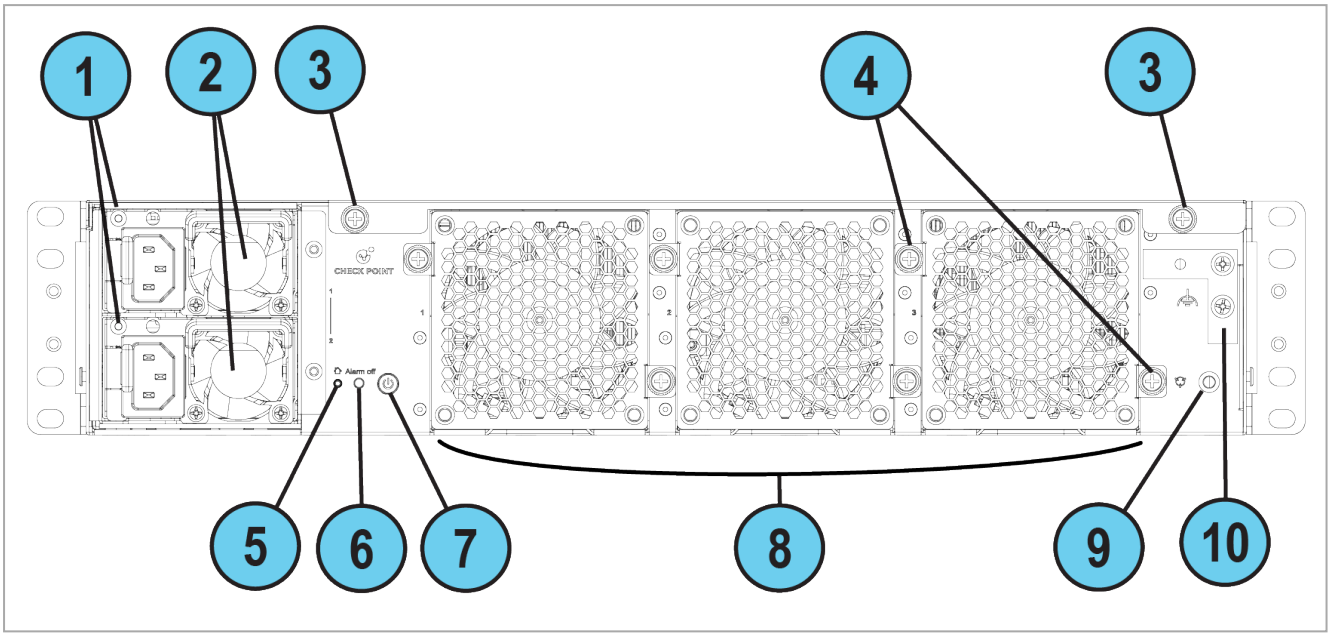


Each pair of LEDs are associated with a port.

- LEDs 1 and 2 that point up are associated with the port located above them (ports labeled 1 and 2 on the chassis).
- LEDs 1 and 2 that point down are associated with the port located below them (ports labeled 3 and 4 on the chassis).

Item	Component	Description
1	Port activity LED	■ Off - No activity ■ On (Green) - Link exists ■ Blinking (Green) - Activity
2	Link Speed LED	■ Off - No link ■ On (Green) - 1 Gbit/s data rate is selected ■ On (Amber) - 10 Gbit/s data rate is selected

Rear Panel



Item	Component	Description
1	LED indicator for each AC power supply unit	■ Off - No power cord is connected to any of the PSUs in the appliance ■ Green - Appliance is turned on ■ Blinking green - Power cords are connected to all PSUs, but the appliance is turned off ■ Amber - No power cord is connected to the PSU, but other PSUs in the appliance are connected to a power cord ■ Blinking amber - Warning about a hardware issue (high temperature, high power, high current, slow fan) that may lead to an issue with the PSU ■ Blinking fast green - PSU in Firmware update
2	Power supply units	Power supply units (PSUs) that you can hot swap. Each PSU connects to an electric outlet. You can use the cable restraints to avoid accidental removal of the power supply cable. The PSUs are numbered from top to bottom in the OS as "Power Supply #1" (top) and "Power Supply #2" (bottom). See *"PSU Configuration and Monitoring" on page 52*.
3	Cover screws	Loosen screws to remove the cover of the appliance.

Item	Component	Description
4	Thumb screws for cooling fan unit	Loosen screws to remove the cooling fan unit from the appliance.
5	Location LED	■ Off - Location beacon is turned off ■ Blinking blue - Location beacon is turned on in Gaia Portal, Gaia Clish, or by pressing the Locator button on the front panel Note - Turn off the Location beacon LED the same way you turned it on.
6	Alarm Off button for power supply units	An alarm sounds if: ■ A power supply cable is not connected to the outlet ■ One of the PSUs is not fully inserted or failed Press this button to turn off the alarm. Note that this button is functional immediately after powering up the appliance.
7	Main power button	When the appliance is turned off, turns the appliance on. When the appliance is turned on, pressing and releasing the button starts an orderly shutdown process. Alternatively, holding the button for 4 seconds forces a machine shut down.
8	Cooling fan units	Units are numbered from right to left: `1`, `2`, `3`. When checking the hardware sensors in the CLI, they are referred to as "`SYS_FAN1`", "`SYS_FAN2`", and "`SYS_FAN3`". See *"Cooling Fan Units Naming Convention" on page 49*.
9	ESD grounding point	When servicing the appliance, connect an ESD strap to this point.
10	Metal grounding plate	Used to connect the grounding lug.

Grounding the Appliance

Before you start, make sure you have these items:

- Two grounding screws (attached to the metal grounding plate).
- A UL listed two-hole grounding lug, similar to Panduit LCD6-38D-L.

- Copper grounding wire 6 AWG (the insulation color must be green and yellow to meet the IEC/UL 62368-1 CL5.6.2.2 requirement or the insulation color must comply with your local electrical regulations).
- Grounding design that complies with the country or local electrical codes.
- A wire crimping tool suitable for the grounding lug type.
- A screwdriver suitable for the grounding screws.

Prerequisites:

1. Insert the grounding wire in the lug (connector).
2. Use the crimping tool to crimp the lug onto the grounding wire.
3. Place the screwdriver near the appliance rear panel.
4. Place the two grounding screws near the appliance rear panel.

Procedure:

1. On the appliance rear panel, locate the metal grounding plate (on the far right).
2. Attach the grounding lug to the grounding plate.

   You can attach it vertically or horizontally.
3. Make sure the two holes in the grounding lug are aligned with the corresponding holes in the grounding plate.
4. Insert the first grounding screw through one of the holes in the grounding lug so it goes into the corresponding hole in the grounding plate.
5. Use a screwdriver to tighten the first screw (maximum torque of 6 kgf×cm).
6. Insert the second grounding screw through the second hole in the grounding lug so it goes into the corresponding hole in the grounding plate.
7. Use a screwdriver to tighten the second screw (maximum torque of 6 kgf×cm).

Cooling Fan Units Naming Convention

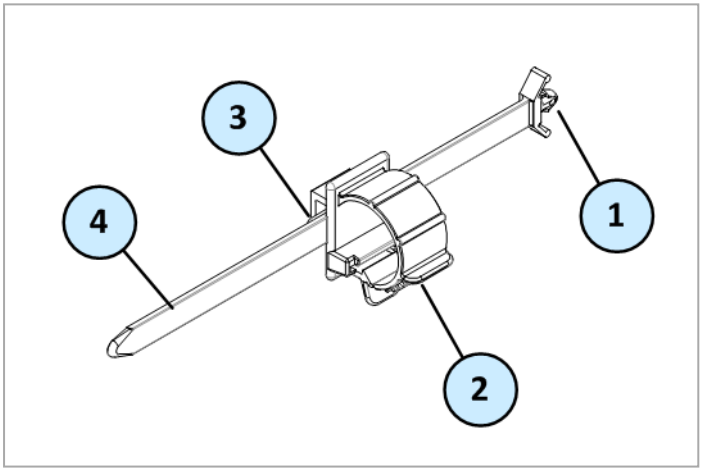
When you check the hardware sensors in the Gaia Portal or Gaia Clish, note that the cooling fans use a different naming convention.

Use this table to identify each of the 3 fans:

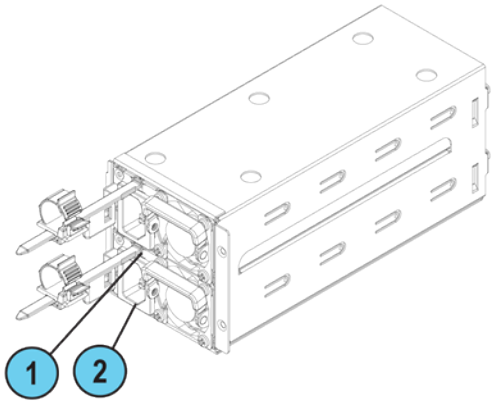
Gaia Portal	CLI
SYS_FAN1 - System Fan #1	SYS_FAN1
SYS_FAN2- System Fan #2	SYS_FAN2
SYS_FAN3 - System Fan #3	SYS_FAN3

Installing the Power Cable Restraint

You can use the power cable restraint to prevent accidental removal of the power cable.



Item	Description
1	Restraint anchor
2	Cable loop
3	Restraint strip tab
4	Restraint strip



Item	Description
1	Restraint strip slot
2	Power supply inlet

To install the power cable restraint:

1. If a power cable is connected to the power supply inlet, disconnect it.
2. Find the restraint strip slot on top of the power supply inlet.
3. Make sure that the cable loop on the restraint faces the power supply inlet.
4. Insert the restraint strip anchor into the slot until it snaps and locks.
5. Connect the power cable to the power supply inlet.
6. Pull the restraint tab to the side to move the cable loop on the restraint strip.
7. Move the cable loop until you can wrap it around the power cable as shown in the next figure.
8. Insert the open side of the cable loop into the loop slot until it is tight against the power cable.
9. Make sure the cable loop is secured and the power cable cannot be removed.

Lights Out Management

The Check Point Lights Out Management (LOM) card lets you use a dedicated management channel to remotely control Check Point appliances. Lights Out Management can also work when the appliance is turned off or does not respond. However, the appliance must be connected to a power source.

For more information about Lights Out Management, see the *Lights Out Management (LOM) HTML5-based Card Administration Guide*.

Dual Redundant BIOS

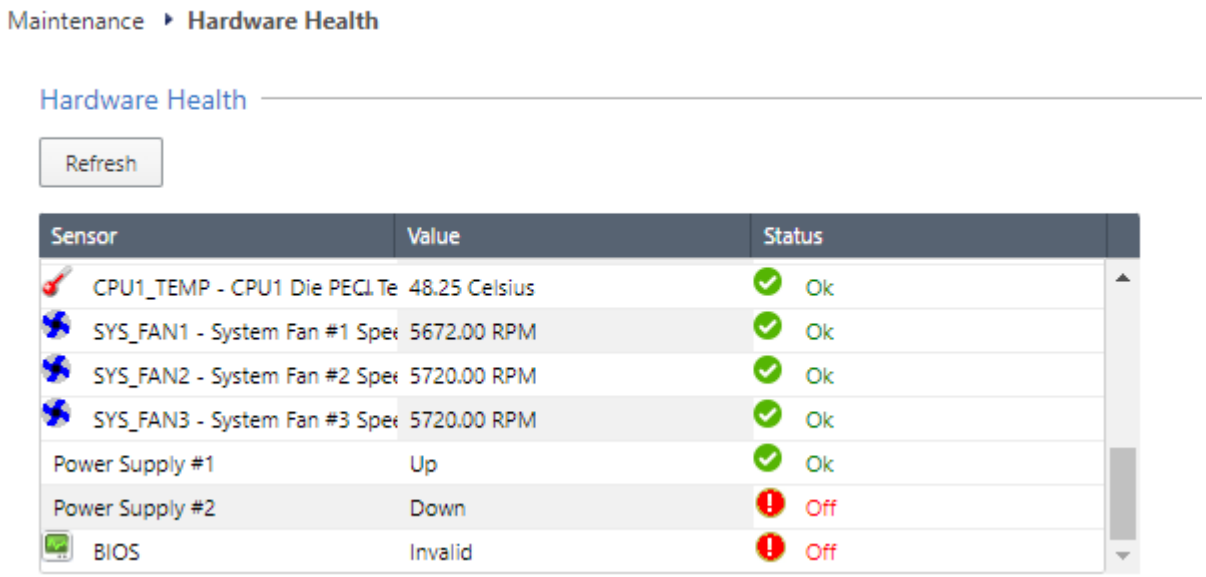
To ensure resilience in the event of a BIOS failure, Smart-1 7000-L Appliances are equipped with dual redundant BIOS images.

If an appliance encounters a BIOS failure, it boots up from a recovery, read-only BIOS image that enables full functionality of the appliance.

These notifications appear in the event of a BIOS failure:

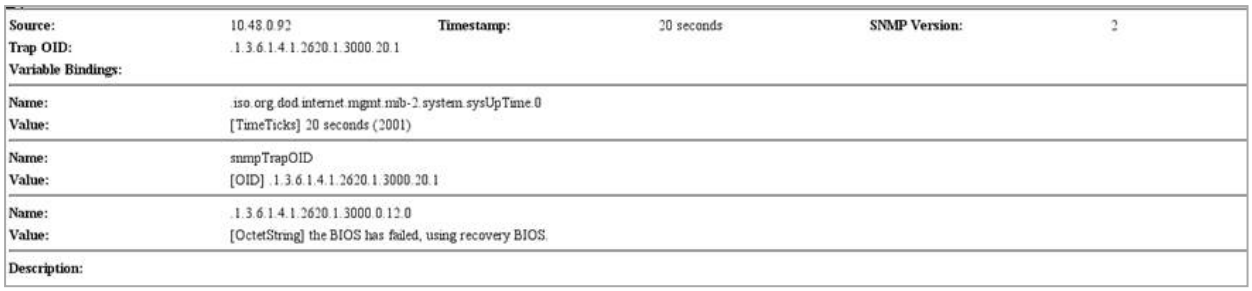
- The appliance's Alert LED on the front panel blinks red.
- The Gaia Portal > Maintenance > Hardware Health page shows that the BIOS sensor is Invalid and its status is Off.

  Example:



- An SNMP trap message is sent (if the `biosFailure` trap was configured in the Gaia Portal or Gaia Clish).

Example:



Source:	10.48.0.92	**Timestamp:**	20 seconds	**SNMP Version:**	2
Trap OID:	.1.3.6.1.4.1.2620.1.3000.20.1				
Variable Bindings:					
Name:	.iso.org.dod.internet.mgmt.mib-2.system.sysUpTime.0				
Value:	[TimeTicks] 20 seconds (2001)				
Name:	snmpTrapOID				
Value:	[OID] .1.3.6.1.4.1.2620.1.3000.20.1				
Name:	.1.3.6.1.4.1.2620.1.3000.0.12.0				
Value:	[OctetString] the BIOS has failed, using recovery BIOS.				
Description:					

To recover from a BIOS failure, see sk108517 or contact *Check Point Support*. The appliance is fully functional until the BIOS recovery is completed. Note that it can take a few minutes for it to boot in BIOS recovery mode.

PSU Configuration and Monitoring

These are the supported PSU configurations for the Smart-1 7000-L appliance model and PSU types:

PSU Type	Number of PSUs
AC / DC PSU	2 PSUs

Important - All PSUs on an appliance must be of the same type: either all AC or all DC.

When a PSU functions correctly:

- The PSU LED is green
- The Alert LED is not blinking due to a PSU issue (might still be blinking due to other errors)
- There is no SNMP alarm.

When a PSU does not function correctly:

- The PSU LED is amber
- The Alert LED is blinking due to a PSU issue
- An SNMP alarm is sent.

To monitor the PSUs in the CLI:

1. Connect to the command line on the appliance.
2. Log in to Gaia Clish.
3. Run:

   ```
   show sysenv ps
   ```

   Example output from a Smart-1 7000-L appliance:

   ```
   Hardware Information

   Name              Value   Unit      Type    Status   Maximum   Minimum
   Power Supply #1   Up      Up/Down   Power   0        Up        Down
   Power Supply #2   Up      Up/Down   Power   0        Up        Down
   ```

   Where:

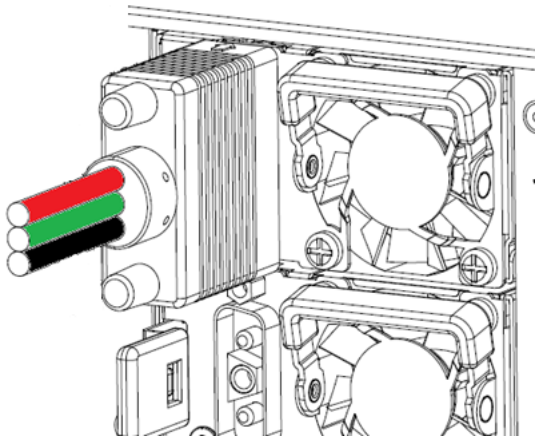
Column	Description
`Name`	Power Supply #1 - The PSU in the top PSU slot. Power Supply #2 - The PSU in the bottom PSU slot.
`Value`	Up - The PSU slot contains a PSU and is up. Down - The PSU slot contains a PSU but it is not connected to a power source. Unknown - There is nothing in the PSU slot.
`Unit`	Up/Down - PSUs are either Up or Down.
`Type`	Power - The sensor type is "power supply".
`Status`	0 - No problems found. 1 - Error.
`Maximum` `Minimum`	The maximum and minimum thresholds. PSUs are only measured as Up or Down.

DC Power Connections

When your appliance uses a DC PSU, make sure to follow these instructions.

To connect DC power wires to a DC PSU connector:

1. Connect the GREEN wire to the ground.
2. Connect the RED wire to the 36-46/46-72 Volt pin on the DC power source.
3. Connect the BLACK wire to the return pin on the DC power source.



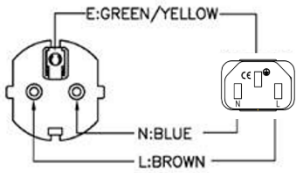
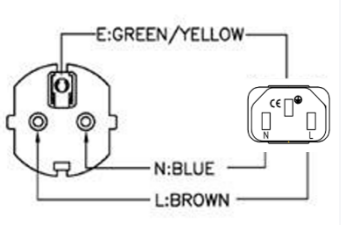
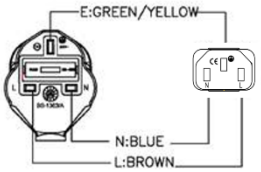
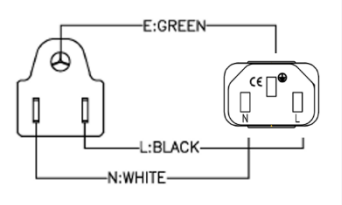
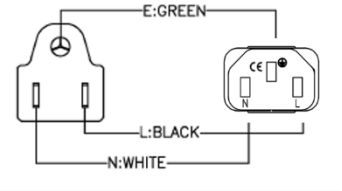
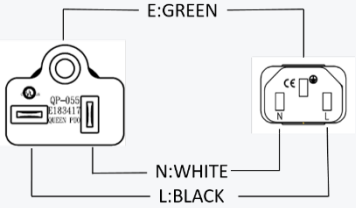
For further instructions, refer to the *Installing and Removing DC Power Supply Units* guide.

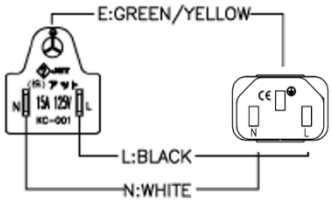
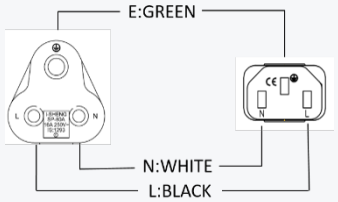
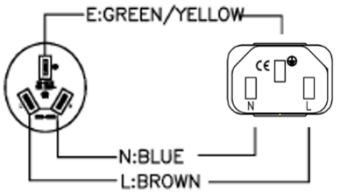
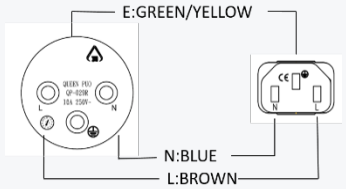
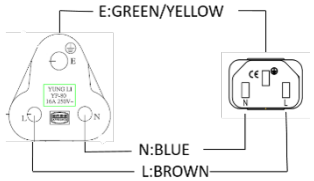
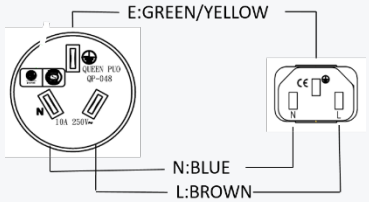
Important - This product is intended to be supplied by a UL Listed DC power source, rated 36-46/46-72Vdc, 35/40A minimum, Tmax=40°C, and the maximum altitude of operation=5000m.
The wire requirements: 8 AWG, 40A minimum, 72V minimum.

AC Power Cords

The supplied AC power cords are specific to the geographical region.

These are some of the available power cords.

Region	Plug	Connector	Cable	Diagram
EU	QP-004, 16A 250V~	QP-007, 10A 250V~	HO5VV-F 3G 0.75mm^2	
Australia	QP-003, 10A 250V~	QP-007, 10A 250V~	HO5VV-F 3G 0.75mm^2	
UK	QP-026, 10A 250V~	QP-007, 10A 250V~	HO5VV-F 3G 0.75mm^2	
US	QP-02, 10A 125V~	QP-007, 10A 125V~	SJT 18AWG 3C 105ºC	
US	QP-02, 15A 125V~	QP-007, 15A 125V~	SJT 14AWG 3C 105ºC	
US	QP-055, 15A 125V~	QP-007, 15A 125V~	SJT 14AWG 3C 105ºC	

Region	Plug	Connector	Cable	Diagram
Japan	QP-005, 10A 250V~	QP-007, 10A 250V~	HO5VV-F 3G 0.75mm^2	
India	QP-013, 16A 250V~	QP-007, 10A 250V~	3INR 3G 0.75mm^2	
China	QP-012, 10A 250V~	QP-007, 10A 250V~	VCTF 3G 2mm^2	
Israel	QP-029R, 16A 250V~	QP-007, 10A 250V~	HO5VV-F 3G 0.75mm^2	
South Africa	YP-80, 16A 250V~	QP-007, 10A 250V~	HO5VV-F 3G 0.75mm^2	
Argentina	QP-048, 10A 250V~	QP-007, 10A 250V~	HO5VV-F 3G 0.75mm^2	

Replacing and Upgrading Components

The appliances have parts that you can easily replace to minimize downtime.

There are also components that you can install to upgrade the appliance.

These parts and components can be used with the appliance:

- Telescopic rails
- Line cards
- Transceivers
- AC and DC power supply units
- Storage devices
- System memory
- Cooling fan units
- Lights Out Management

For more information about how to install these parts and components, see the appliance Home Page sk182601.

Warning - Unless directed to do so by Check Point Software Technologies Ltd., you are prohibited by warranty and support agreements to replace any parts.

RAID Configuration

RAID (Redundant Array of Independent Disks) combines multiple storage devices into logical units to increase data reliability and disk performance through redundancy. RAID arrays configured for fault tolerance can survive one or more disk failures without losing data.

The Smart-1 7000-L RAID controllers run a variety of storage solutions that range from disk mirroring to nested RAID. The nested levels use three standard RAID levels for additional reliability and performance. RAID levels on the Smart-1 controllers are initially set as defaults. Other supported RAID levels are optional.

You must configure RAID if you change:

- A default RAID level.
- The number of storage devices.

You do not need to configure RAID again when you replace a faulty disk. The replaced disk is synchronized automatically.

For more information, see *Smart-1 7000-L / 7000-XL / 7000-UL Appliances RAID Administration Guide*

Restoring Factory Defaults

If necessary, restore the appliance to its factory default settings.

Important - If you restore factory defaults, note that all information on the appliance is deleted.

Restoring in Gaia Portal

To restore an appliance in Gaia Portal:

1. In your web browser, connect to the management IP address:

   ```
   https://<IP Address of Appliance>
   ```

2. Log in to the **Gaia Portal** with the administrator username and password.
3. In the left navigation tree, click Maintenance > Factory Defaults.

   The Factory Defaults window opens. The image installed on the appliance is shown.
4. Click Apply.

   The appliance reboots and begins the installation process of the selected version.

Restoring from the Boot Menu

To restore the appliance from the Boot Menu:

1. Connect the supplied serial cable's RJ45 or USB type-C connector to the console port on the front of the appliance.
2. From the computer, open a terminal emulation program such as PuTTY or Microsoft HyperTerminal.
3. Configure the terminal emulation program:
   - In PuTTY select the **Serial** connection type.
   - In the HyperTerminal **Connect To** window, select a port from the Con**nect using** list.
4. Define the serial port settings:

   9600 BPS, 8 bits, no parity, 1 stop bit
5. From the **Flow control** list, select **None**.

6. Connect to the appliance.
7. Reboot or turn on the appliance.

   The appliance initializes and status messages appear in the terminal emulation program.
8. When the message "**Press any key to see the boot menu**" appears, you have approximately four seconds to hit any key to activate the **Boot** menu.
9. From the **Boot** menu, select the relevant **Reset to factory defaults** image.
10. Press **Enter**.

    The appliance initializes and status messages appear in the terminal emulation program.

Restoring in Gaia Clish

To restore the appliance in Gaia Clish:

1. Connect to the command line on the appliance.
2. Log in to **Gaia Clish**.
3. Run:

   ```
   set fcd revert<SPACE><TAB>
   ```

   ```
   set fcd revert <Name of Default Image>
   ```
4. Follow the instructions on the screen.
5. Reboot the appliance:

   ```
   reboot
   ```

Support

For additional technical information about Check Point products, consult the *Check Point Support Center*.