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SCOPIA 400



Platform Guide

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RADVISION
Delivering the Visual Experience

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ABOUT THIS MANUAL

The [SCOPIA 400 Platform Guide](#) provides information on the SCOPIA 400 platform and its components. For information and operating procedures pertaining to a specific element board or application, refer to the corresponding manual provided with the product.

RELATED DOCUMENTATION

The SCOPIA 400 platform documentation set is available on the RADVISION Utilities and Documentation CD-ROM and includes manuals and online helps. The manuals are available in PDF format.

Note You require Adobe Acrobat Reader version 6.0 or later to open the PDF files. You can download Acrobat Reader free of charge from www.adobe.com.

FEEDBACK

The team at RADVISION constantly endeavors to provide accurate and informative documentation. If you have comments or suggestions regarding improvements to future publications, we would value your feedback.

Please send your comments to doc_comments@radvision.com.

We thank you for your contribution.

1

SCOPIA 400 PLATFORM CHASSIS OVERVIEW

This section introduces the RADVISION SCOPIA 400 platform and describes the SCOPIA 400 chassis, and includes the following topics:

- [About the SCOPIA 400 Platform](#)
- [About the SCOPIA 400 Chassis](#)
- [About the Rear Transition Module](#)
- [Viewing System Indicators](#)
- [SCOPIA 400 Chassis Power Supply](#)

ABOUT THE SCOPIA 400 PLATFORM

The SCOPIA 400 platform is a high performance, multi-functional chassis that supports mix-and-match functionality. This highly configurable and scalable design provides maximum flexibility for configuring platforms to meet a wide variety of functional and performance application requirements.

The SCOPIA 400 platform consists of a number of embedded applications on blades that are inserted into the SCOPIA 400 chassis.

ABOUT THE SCOPIA 400 CHASSIS

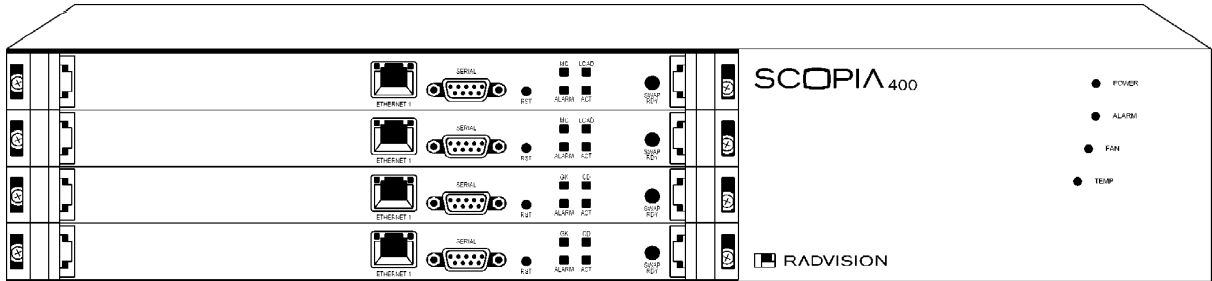
The SCOPIA 400 chassis is 3.5" (2U) high and can mount in a 19-inch rack. The chassis can accommodate one RADVISION device blade in each of its four slots. Each board receives power via the backplane.

There are four slots at the front and rear of the chassis. The front slots are used for the main device boards. The rear slots are used only by Gateway Rear Transition Module (RTM) boards which allow a connection to the ISDN or serial network.

About the Rear Transition Module

The chassis provides easy access for maintenance and board replacement.

Figure 1-1 SCOPIA 400 Chassis Front View



ABOUT THE REAR TRANSITION MODULE

The rear panel of the SCOPIA 400 chassis contains four slots for the insertion of Rear Transition Module (RTM) boards that connect to the chassis backplane. The RTM provides a Circuit Switch Network connection.

VIEWING SYSTEM INDICATORS

You can view system-level monitoring information by monitoring the LED indicators on the front of the SCOPIA 400 chassis. The LEDs are connected to the chassis System Information Card (SIC).

Note You can also monitor chassis functions remotely via the web user interface of the MCU or Gateway installed in the top slot of the SCOPIA 400 chassis. If you install a SCOPIA Media and Video Processor in the top slot of the SCOPIA 400 chassis, monitoring via the web is not available.

SYSTEM POWER INDICATION

The POWER LED functions as follows:

- Illuminates green to indicate that the power supply is operating normally.
- Illuminates red to indicate that one of the power supply units is malfunctioning, or that one power feed is missing.

SYSTEM ALARM INDICATION

The ALARM LED functions as follows:

- Illuminates green to indicate that the system is functioning normally.
- Illuminates red to indicate that a system failure has been detected. Check other LEDs to identify the type of failure.

SYSTEM FAN INDICATION

The FAN LED functions as follows:

- Illuminates green to indicate that the fans are operating properly.
- Illuminates red when that a malfunction occurs in one or more fans.

SYSTEM TEMPERATURE INDICATION

The TEMP LED functions as follows:

- Illuminates green to indicate normal operation.
- Illuminates red when the operating temperature inside the chassis rises above the High threshold value set at **System > High** in the web user interface of the MCU and Gateway.
- Blinks green to indicate an inaccurate temperature reading. If the LED blinks green for a few seconds and then illuminates continuously, no action is necessary. If the LED blinks green continuously, contact RADVISION Customer Support.

NORMAL SYSTEM STARTUP LED INDICATIONS

This section describes the normal LED indications that you should see when the system starts up.

At startup, the normal system monitor LED indications are as follows:

- The POWER LED indicator lights green and remains green.
- The ALARM, FAN and TEMP LED indicators flash twice, alternating between red and green. When the platform initialization is complete, the LED indicators remain green.

SCOPIA 400 CHASSIS POWER SUPPLY

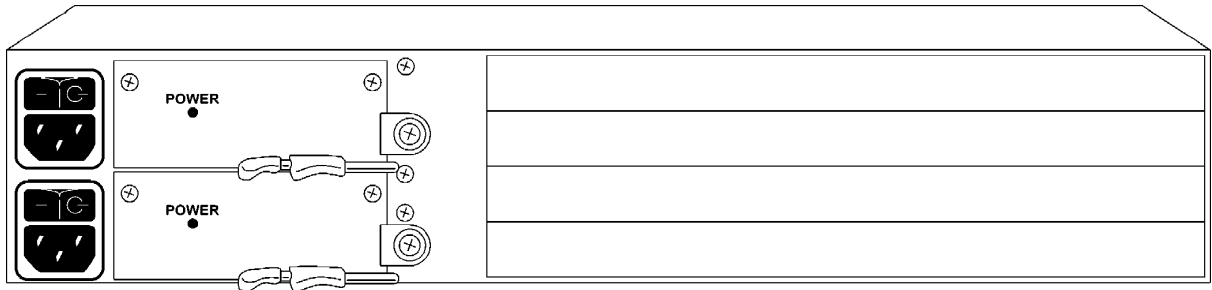
The rear panel of the SCOPIA 400 chassis contains dual power supply units, each with a power switch, an AC mains power connector and a safety fuse. The two PSUs use current sharing to provide redundancy—if one PSU fails, the second PSU can handle the operational load of the chassis until the failed unit is replaced. The PSUs are located to the left of the chassis rear panel., as shown in [Figure 1-2](#).

Each power supply has one LED indicator—green to indicate normal operation, red to indicate a malfunction.

In normal operation, both PSUs display a lit green LED, and the front panel system monitoring POWER LED lights green.

Note To enable PSU redundancy, connect both power inlets to a power source. If you connect only one power cable, the POWER LED on the chassis front panel and the LED indicator on the PSU not in use will both light red.

Figure 1-2 SCOPIA 400 Chassis Power Supply



REPLACING A POWER SUPPLY UNIT

You can remove and replace each power supply unit, even while in operation (Hot Swap). The platform can continue to operate with a single PSU until the second PSU is replaced.

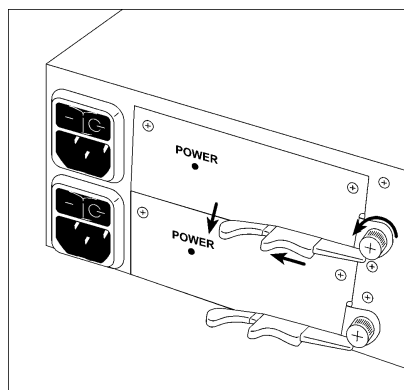
A lever is provided on each PSU to assist in the removal of each unit.



Procedure

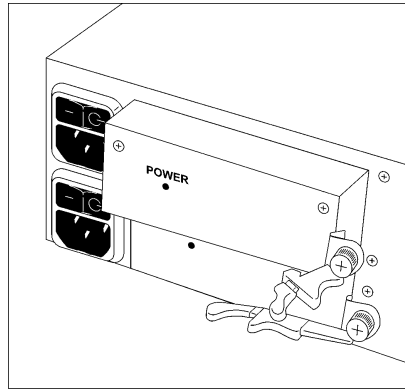
- 1 On the chassis rear panel, loosen the screw of the PSU you want to remove, as shown in [Figure 1-3](#).
- 2 Firmly grip the handle of the PSU you want to remove. Use your other hand to brace against the chassis and provide leverage.

Figure 1-3 Preparing to Remove a Power Supply Unit



- 3 Pull out the PSU slowly, as shown in [Figure 1-4](#).

Figure 1-4 Removing a Power Supply Unit



- 4** Insert a new PSU, sliding it into the connectors inside the PSU slot.
 - 5** Press firmly on the new PSU to ensure that the connectors have engaged properly and that the outside of the PSU is in line with the chassis rear panel.
 - 6** Check to see that the green LED lights up on the new PSU and on the chassis front panel.
 - 7** Tighten the screw.
-

SCOPIA 400 Chassis Power Supply

2

SCOPIA 400 PLATFORM DEVICE OVERVIEW

This section introduces the products that the RADVISION SCOPIA 400 platform offers.

[Table 2-1](#) briefly describes chassis-based devices.

Table 2-1 *Chassis-based Devices*

Device	Description
SCOPIA MCU SP blade	A Multipoint Conferencing Unit that provides advanced functionality for multipoint voice and videoconferencing over IP. Responsible for signaling and audio. When working alone, supports audio conferencing of 96 audio ports. Can be mixed and matched with up to four MVP cards to create a 96 flat port video bridge. The SCOPIA MCU card has no video capabilities.
MVP SP	A video processing card dedicated to the SCOPIA MCU that can support 24 flat capacity video ports.
MSP SP	A Multimedia Streaming Proxy that enables streaming to mobile handsets from streaming servers and network cameras.

ABOUT SCOPIA 400 PLATFORM DEVICES

Table 2-1 *Chassis-based Devices*

Device	Description
Gateway P20 SP blade	Holds two PRI interfaces per blade for translation between H.320 and H.323 allowing PSTN endpoints to communicate with H.323 LAN endpoints.
Gateway S40 SP blade	Holds four serial interfaces per blade for translation between H.323 and serial protocols.
Gateway [gw-N30]	An Interworking Gateway enabling conversion between H.323 and SIP endpoints. The component of the RADVISION 3G system which supports SIP networks.
Gateway [gw-P25/M SP]	Holds two PRI interfaces per board for interfacing with 3G circuit switched cellular networks to which 3G-324M videophones are connected.
MVP/M	A video processing card dedicated to the Gateway [gw-P25/M SP]. The MVP/M can perform MPEG-4 to H.263 transcoding of up to 30 or 60 video streams at 52 Kbps, depending on board type.
AS-10 board	A high performance Windows™ 2000 Pro Application Server board hosting various service applications.
AS-20 board	A high performance Linux Red Hat Application Server board hosting various service applications.

3

CABLE CONNECTIONS AND PIN-OUTS

This section describes the pin-to-pin and pin-out configurations of the connectors and cables of the SCOPIA 400 chassis, including the following topics:

- [Unit RS-232 9-Pin Serial Port](#)
- [9-Pin Serial Port Terminal Cable](#)
- [RJ-45 8-Pin IP Network Port](#)
- [RJ-45 Serial Port Adapter Cable](#)
- [Circuit Switch Network Port](#)

UNIT RS-232 9-PIN SERIAL PORT

Table 3-1 describes the SCOPIA 400 chassis RS-232 9-pin D-type serial port pin-out configuration.

Table 3-1 RS-232 9-pin D-Type Serial Port Pin-out

Pin	Function	I/O
1	NC	
2	RXD	Input
3	TXD	Output
4	NC	
5	GND	
6	NC	
7	NC	
8	NC	
9	NC	

9-PIN SERIAL PORT TERMINAL CABLE

Table 3-2 describes the pin-to-pin configuration of the RS-232 terminal cable provided with the SCOPIA 400 chassis.

Table 3-2 RS-232 Terminal Cable Pin-to-Pin Configuration

To Chassis (DB-9 Male)	Function	To PC Terminal (DB-9 Female)
2	TXD	3
3	RXD	2
5	GND	5

RJ-45 8-PIN IP NETWORK PORT

Table 3-3 describes the pin-out configuration of the RJ-45 IP network port.

Table 3-3 *Pin-out Configuration of the RJ-45 IP Network Port*

Pin	Function	I/O
1	TXD+	Output
2	TXD+	Output
3	RXD+	Input
4	NC	
5	NC	
6	RXD-	Input
7	NC	
8	NC	

RJ-45 SERIAL PORT ADAPTER CABLE

Table 3-4 describes the pin-to-pin configuration of the RJ-45 to DB-9 adapter cable used to connect a PC terminal to the RJ-45 serial port. This cable is provided with the SCOPIA 400 chassis.

Table 3-4 *Pin-to-Pin Configuration of the RJ-45 to DB-9 Adapter Cable*

RJ-45 (Male)	DB-9 (Female)	Function
1	NC	
2	NC	
3	3	TXD
4	NC	
5	5	GND
6	2	RXD
7	NC	
8	NC	

CIRCUIT SWITCH NETWORK PORT

Table 3-5 describes the circuit switch network port RJ-45 connector pin-out configuration.

Table 3-5 *Circuit Switch Network Port RJ-45 Connector Pin-out*

Pin	Function
1	RXD +
2	RXD -
3	NC
4	TXD +
5	TXD -
6	NC
7	NC
8	NC

4

TECHNICAL SPECIFICATIONS

This section provides technical specifications for the SCOPIA 400 Chassis.

TECHNICAL SPECIFICATIONS TABLE

Table 4-1 SCOPIA 400 Chassis Technical Specifications

Chassis Dimensions	<ul style="list-style-type: none">■ Height: 2U (3.5 inches or 88.9 mm)■ Width: 17.25 inches (438.15 mm)■ Depth: 10 inches (254 mm)■ Weight: 8 kg (17.64 lbs) empty, 11 kg (24.25 lbs) full—may vary according to configuration
Element Board Dimensions	<ul style="list-style-type: none">■ Width: 9.19 inches (233.35 mm)■ Depth: 6.3 inches (160 mm)
RTM Board Dimensions	<ul style="list-style-type: none">■ Width: 9.19 inches (233.35 mm)■ Depth: 3.15 inches (80 mm)
System Monitoring LED Indicators	<ul style="list-style-type: none">■ POWER■ ALARM■ FAN■ TEMP

Table 4-1 SCOPIA 400 Chassis Technical Specifications (continued)

Board LED Indicators	
Front panel	<ul style="list-style-type: none"> ■ ETHERNET: <ul style="list-style-type: none"> □ Link □ Connection Speed ■ GK ■ LOAD (MCU only) ■ CD (Gateways only) ■ ALRM ■ ACT ■ MC (MVP and MVP/M only)
Rear panel (Gateway P20 SP)	<ul style="list-style-type: none"> ■ PRI 1 or 2: <ul style="list-style-type: none"> □ ACT □ D-Ch □ ALRM
Rear panel (Gateway S40 SP)	<ul style="list-style-type: none"> ■ PORT 1 to 4: <ul style="list-style-type: none"> □ ACT □ ALRM
Rear panel (Gateway [gw-P25/M SP])	<ul style="list-style-type: none"> ■ ALRM 1 or 2: <ul style="list-style-type: none"> □ REMOTE □ LOS/LOF ■ CD 1 or 2
Push Buttons	<ul style="list-style-type: none"> ■ RST (front panel)
Communication Interfaces	
Front panel	<ul style="list-style-type: none"> ■ Ethernet 10/100 Mbps auto-negotiate speed select ■ Asynchronous serial port RS-232 connected via 9-pin D-type connector

Table 4-1 SCOPIA 400 Chassis Technical Specifications (continued)

Rear panel (Gateway P20 SP and Gateway [gw-P25/M SP])	<ul style="list-style-type: none"> ■ 2 x ISDN E1/T1 PRI port: <ul style="list-style-type: none"> □ T1 mode <ul style="list-style-type: none"> Channels: 23B + 1D Clock rate: 1.544 Mbps Framing: F4, F12, ESF no CRC, ESF, F72 Encoding: NRZ, AMI-B7, B8ZS Line impedance: 100Ω □ E1 mode <ul style="list-style-type: none"> Channels: 30B + 1D Clock rate: 2.048 Mbps Framing: Double framing, CRC4, Extended CRC4 Encoding: NRZ, CMI, AMI, HDB3 Line impedance: 120Ω
Rear panel (Gateway S40 SP)	<ul style="list-style-type: none"> ■ 4 x serial ports
Chipset	<ul style="list-style-type: none"> ■ PowerPC MPC7410 32-bit RISC microprocessor running at 500MHz. ■ MPC8260 communication processor running at 300/200MHz.
Operating System	<ul style="list-style-type: none"> ■ RTOS, VxWorks 5.4
Memory	<ul style="list-style-type: none"> ■ 32 MB on-board flash memory for field upgrades ■ 2 MB L-2 Cache at 250MHz ■ 128 MB SDRAM
Failsafe	<ul style="list-style-type: none"> ■ Watchdog timer built in
Power supply	<ul style="list-style-type: none"> ■ Dual power supply units ■ Full redundancy ■ Power on/alarm LED on each unit. ■ Input 100-240VAC, 50/60Hz, autoswitched ■ Output + 3.3VDC, + 5VDC, ± 12VDC ■ Maximum power load 300W ■ Each power supply unit contains a 6.2 amp internal unit on-board fuse.

Table 4-1 *SCOPIA 400 Chassis Technical Specifications (continued)*

Ventilation Fans	<ul style="list-style-type: none">■ 2 fan units■ Brushless 12V DC motor■ Locked rotor detection■ Polarity protection■ Auto-restart capability
-------------------------	---

5

SAFETY

This section describes safety procedures and requirements for operating the SCOPIA 400 platform, including the following topics:

- [Electrical Safety](#)
- [ESD Procedures](#)

ELECTRICAL SAFETY

To avoid an electric shock or damage to the SCOPIA 400 platform, servicing should be performed by qualified service personnel only.

To reduce the risk of damaging power surges, RADVISION recommends installing an AC surge arrester in the AC outlet from which the SCOPIA 400 platform is powered.

Warning

- Changes or modifications to the device that are not approved by the party responsible for compliance could void the user's authority to operate the equipment.
 - There is a danger of explosion if the cPCI board battery is incorrectly replaced. Replace with the same type, or an equivalent type recommended by the manufacturer. Dispose of used batteries only according to manufacturer instructions.
-

GROUNDING

The power cable of the SCOPIA 400 platform should only be connected to a power outlet that has a protective earth contact. Do not use an extension cord that does not have a protective conductor (ground). The SCOPIA 400 chassis can become dangerous if you interrupt any of the protective conductors (grounding) or disconnect any of the protective earth terminals.

Caution

- For North American installations, select a 3-conductor (18 AWG) power supply cord that is UL listed and CSA certified. The cord must be terminated in a molded-on plug cap rated 125V/5A, with a minimum length of 1.5m (6 feet) and no longer than 4.5m (approximately 14 feet).
- This is a class I unit. In Denmark, use this unit with an AC cord suited to Danish specifications. The cord should include an earthing conductor. Plug the unit into a wall socket outlet which is connected to the protective earth contact. Do not use socket outlets which are not connected to a protective earth contact!

Varoitus Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan.

Advarsel Apparatet må tilkoples jordet stikkontakt.

Varning Apparatens skall anslutas till jordat uttag.

HIGH VOLTAGE

Disconnect the SCOPIA 400 chassis from the power line before removing the cover. Avoid any adjustment, maintenance, or repair of an opened chassis under voltage. These actions should only be carried out by a skilled person who is aware of the dangers involved. Capacitors inside the chassis may still be charged, even if the unit has been disconnected from the power source.

POWER SUPPLY

Caution Risk of electric shock and energy hazard. Disconnecting one power supply disconnects only one power supply module. To isolate the unit completely, disconnect all power supplies.

ESD PROCEDURES

To prevent damage to RADVISION element boards by random electrostatic discharge (ESD), the use of wrist straps is highly recommended.

SICHERHEIT

Dieses Kapitel beschreibt die Sicherheitsvorschriften und -vorgaben zur Bedienung der SCOPIA 400-Plattform einschließlich des Folgenden:

- Elektrische Sicherheit
- ESD-Verfahren
- Warnhinweise

ELEKTRISCHE SICHERHEIT

Zur Vermeidung eines elektrischen Schlags oder Schäden an der SCOPIA 400/1000-Plattform darf die Wartung von qualifiziertem Fachpersonal vorgenommen werden.

RADVISION empfiehlt zur Minderung des Risikos von Stromstößen die Installation eines Stromableiters in der Stromquelle, aus der die SCOPIA 400 gespeist wird.

ERDUNG

Das Stromkabel der SCOPIA 400/1000 Plattform darf nur an Stromquellen angeschlossen werden, die einen schützenden Erdkontakt aufweisen. Keine Verlängerungsschnur verwenden, die keinen Schutzleiter (Erdung) aufweisen. Das SCOPIA 400/1000 Gehäuse kann gefährlich werden, wenn einer der Schutzleiter (Erdung) unterbrochen oder einer der schützenden Erdungskontakte abgeklemmt wird.

HOCHSPANNUNG

Das SCOPIA 400/1000 Gehäuse vom Stromnetz nehmen, bevor die Abdeckung entfernt wird. Anpassungen, Wartung oder Reparaturen eines geöffneten Gehäuses unter Spannung vermeiden. Diese Tätigkeiten dürfen nur von einer qualifizierten Person durchgeführt werden, die sich der Gefahren bewusst ist. Kondensatoren im Gehäuse können immer noch geladen sein, selbst wenn das Gerät bereits vom Stromnetz genommen wurde.

NETZTEIL

Achtung Gefahr des elektrischen Schocks. Entfernen des Netzsteckers eines Netzteils spannungsfrei Um alle Einheiten spannungsfrei zu machen, sind die Netzstecker aller Netzteile zu entfernen.

ESD-VERFAHREN

Zur Vermeidung von Beschädigungen der RADVISION Einselemente durch zufällige elektrostatische Entladungen (ESD) wird die Verwendung von Schlaufen sehr empfohlen.

WARNHINWEISE

- Änderungen oder Modifikationen, die von der für die Einhaltung verantwortlichen Partei nicht ausdrücklich genehmigt sind, können die Erlaubnis zur Nutzung des Geräts durch den Benutzer unwirksam machen.
- Es besteht Explosionsgefahr, wenn die cPCI Steckbatterie nicht richtig eingesetzt wird. Durch denselben oder einen gleichwertigen, vom Hersteller empfohlenen Typersetzen. Entsorgung gebrauchter Batterien nur gemäß der Herstelleranweisungen.
- Die Stromversorgung darf nur von qualifiziertem Fachpersonal ersetzt werden.

SEGURIDAD

SEGURIDAD ELECTRICA

Para prevenir un choque eléctrico o dañar la plataforma SCOPIA 400, los servicios deben ser hechos solamente por personal de servicios calificados.

Para reducir el riesgo de daño por picos de voltaje, RADVISION recomienda la instalación de un supresor de voltaje para corriente alterna AC en el circuito del tomacorriente para la plataforma SCOPIA 400.

Advertencia

- Cambios o modificaciones al dispositivo que no son aprobados por el grupo responsable de su cumplimiento podría invalidar la autoridad del usuario para operar el equipo.
- Existe el peligro de explosión si la batería de la tarjeta cPCI es incorrectamente reemplazada. Reemplaza celda con una del mismo tipo, o con una equivalente y recomendada por el fabricante. Desechar las baterías usadas solamente de acuerdo a las instrucciones del fabricante.

TIERRA

El cable eléctrico de energía para la plataforma SCOPIA 400 debe ser conectado solamente a un receptáculo de enchufe que tiene un contacto protector a tierra. No utilice un cable de extensión sin un conductor protector a tierra. El chasis de la SCOPIA 400 puede ser muy peligroso si usted interrumpe cualquiera de los conductores protectores a tierra, o si usted desconecta cualquiera de los terminales protectores a tierra.

ALTO VOLTAGE

Desconecte el chasis SCOPIA 400 de la fuente de suministro de energía antes de remover la tapa. Evite hacer ajustes, mantenimiento o reparar un chasis abierto y encendido. Estas acciones pueden ser hechas solamente por una persona calificada que está conciente de los potenciales peligros. Capacitores dentro del chasis pueden todavía estar cargados, incluso cuando la unidad ha sido desconectada de la fuente de suministro de energía.

ABASTECIMIENTO DE ELECTRICIDAD

Advertencia Para evitar peligro de golpe eléctrico. Desconectando un solo abastecimiento eléctrico desconectara un solo modulo. Para evitar contacto eléctrico de toda la unidad debe desconectar todos los abastecimientos eléctricos.

PROCEDIMIENTOS ESD

Para prevenir daño a las tarjetas elementos de RADVISION por descargas electrostáticas aleatorias (ESD), el uso de bandas conductoras para descarga en la muñeca de los operadores en el área es altamente recomendado.

SECURITE

Cette section décrit les procédures et les exigences en matière de sécurité concernant la mise en exploitation de la SCOPIA 400 platform. Les sujets suivants y sont en particulier abordés:

- Sécurité Électrique
- Prevention des Décharges Electrostatiques

SECURITE ELECTRIQUE

Afin de prévenir tout risque d'électrocution ou de détérioration de la SCOPIA 400 platform, l'entretien doit être effectué exclusivement par des techniciens de maintenance qualifiés.

Afin de réduire le risque de dommages occasionnés par les surtensions électriques, RADVISION recommande de brancher un parasurtenseur dans la prise électrique à partir de laquelle la SCOPIA 400 platform sera alimentée.

Attention

- Apporter des changements ou modifications à l'équipement sans avoir obtenu l'approbation de l'entité responsable de la conformité peut annuler l'autorisation d'utilisation de l'équipement dont bénéficie l'utilisateur.
 - Il y a risque d'explosion si la batterie de la carte cPCI n'est pas remplacée correctement. Remplacer par une pile de même type, ou d'un type équivalent recommandé par le fabricant. Ne se débarrasser des piles usagées qu'en suivant les instructions du fabricant.
-

MISE A LA TERRE

Le câble d'alimentation électrique de la SCOPIA 400 platform doit être connecté uniquement à une prise électrique reliée à une prise de terre. N'utilisez pas de rallonge ne possédant pas de conducteur de protection (terre). Le SCOPIA 400 chassis peut présenter un danger si vous coupez l'un quelconque des conducteurs de protection (terre) ou déconnectez l'un quelconque des équipements terminaux de mise à la terre.

Le connecteur de terre externe doit toujours être relié au circuit de prise de terre.

Attention

- Pour les installations d'Amérique du Nord, sélectionnez un cordon d'alimentation électrique à trois conducteurs (18 AWG) bénéficiant d'une inscription UL et certifié CSA. Le cordon doit être terminé par un connecteur moulé et autoriser une intensité de 5 A en 125V; sa longueur doit être comprise entre 1,5 m et 4,5 m.
 - Cette unité est de classe I. Au Danemark, utilisez cette unité avec un cordon d'alimentation électrique conforme aux spécifications danoises. Le cordon électrique doit comporter un conducteur de terre. Branchez l'unité sur une prise électrique murale reliée à la prise de terre. N'utilisez pas de prise électrique non connectée à une prise de terre!
 - En Suède et en Finlande, l'installation ne doit se faire que dans des zones à accès contrôlé.
-

HAUTE TENSION

Débranchez le SCOPIA 400 chassis de la prise électrique avant d'enlever le couvercle. Évitez toute intervention, opération d'entretien ou réparation sur un châssis ouvert sous tension. Ces actions ne devraient être effectuées que par une personne expérimentée et connaissant les dangers encourus. Certains condensateurs à l'intérieur du châssis peuvent être encore chargés, même après que l'unité a été déconnectée de la source électrique.

**ALIMENTATION
ÉLECTRIQUE**

Attention Risque d'électrocution et autres dangers liés à l'électricité. Débrancher un câble d'alimentation ne déconnecte qu'un seul module d'alimentation électrique. Pour isoler complètement l'unité, vous devez déconnecter tous les câbles d'alimentation électrique.

**PREVENTION DES
DECHARGES
ELECTROSTATIQUES**

Afin d'éviter d'endommager les composants des cartes RADVISION par suite de décharges électrostatiques imprévues, il est vivement recommandé de porter un bracelet électrostatique.

БЕЗОПАСНОСТЬ

В этом разделе описываются процедуры обеспечения безопасности и требования к управлению платформы SCOPIA 400 platform, включая следующие темы:

- [Electrical Safety](#)
- [ESD Procedures](#)

ЭЛЕКТРОБЕЗОПАСНОСТЬ

Во избежание электрического удара или повреждения платформы SCOPIA 400 platform, обслуживание должно выполняться только квалифицированным техническим персоналом.

Для снижения риска повреждения от набросов мощности, RADVISION рекомендует установить разрядник для защиты от перенапряжений в сетевой розетке, от которой питается платформа SCOPIA 400 platform.

Предостережение

- Внесение в устройство изменений, не санкционированных стороной, отвечающей за обеспечение соответствия, может лишить пользователя права эксплуатировать оборудование.
- При неправильной замене батарейки платы сPCI возникает опасность взрыва. Заменяйте батарейкой того же или эквивалентного типа, рекомендуемого изготовителем. Ликвидируйте использованные батарейки только в соответствии с инструкциями изготовителя.

ЗАЗЕМЛЕНИЕ

Кабель питания платформы SCOPIA 400 platform должен включаться только в силовую розетку, имеющую защитный заземляющий контакт. Не используйте удлинительный шнур, у которого нет защитного провода (земли). Шасси SCOPIA 400 chassis может стать опасным, если оборвать какой-либо из защитных проводов (заземление) или отсоединить какую-либо из клемм защитного заземления.

Предупреждение

- Для североамериканских установок выбирайте 3-проводной (с проводами калибра 18 AWG) шнур питания, зарегистрированный Лабораторией по технике безопасности США (UL) и сертифицированный Канадской ассоциацией по стандартизации (CSA). Шнур должен заканчиваться заформованным штекером, рассчитанным на 125 В и 5 А, и иметь длину не меньше 1,5 м (6 футов) и не больше 4,5 м (приблизительно 14 футов).
- Это устройство класса I. В Дании используйте это устройство со шнуром питания переменного тока, соответствующим принятым в Дании техническим условиям. Шнур должен иметь заземляющий провод. Подключайте устройство к стенной розетке, соединенной с защитным заземляющим контактом. Не пользуйтесь розетками, не имеющими защитного заземляющего контакта!

**ВЫСОКОЕ
НАПРЯЖЕНИЕ**

Прежде чем снимать крышку, отсоедините шасси SCOPIA 400 chassis от линии питания. Старайтесь не выполнять регулировку, техобслуживание или ремонт при открытом шасси под напряжением. Такие действия должны выполняться только квалифицированным работником, который сознает сопряженную с этим опасность. Конденсаторы внутри шасси могут сохранять заряд, даже когда устройство отключено от источника питания.

ПИТАНИЕ

Предупреждение Риск электрического удара и физически опасных факторов. Отсоединение одного источника питания отсоединяет только один блок питания. Чтобы полностью изолировать устройство, отсоедините все источники питания.

ПРОЦЕДУРЫ ЭСР

Чтобы платы RADVISION не получили повреждения от случайного электростатического разряда (ЭСР), настоятельно рекомендуется использование электростатического браслета.

6

COMPLIANCE AND CERTIFICATIONS

This section provides certifications that have been approved for the SCOPIA 400 platform, including the following topics:

- [Safety Compliance](#)
- [EMC](#)
- [Telecom](#)
- [Environmental Compliance](#)

SAFETY COMPLIANCE

This section lists the safety standards supported by the SCOPIA 400 platform.

- UL 60950: 2000
- CAN/CSA C22.2 No. 60950-00
- GS Approval (EN 60950: 2000)
- EN 60950: 2000
- ACA TS001-1997
- AS/NZS 3260: 1993, A4: 1997
- AS/NZS 60950: 2000
- IEC 60950: 1999 (CB test report)

EMC

This section lists the EMC compliance for the SCOPIA 400 platform.

- FCC Part 15, Subpart B, Class A
- ICES-003
- EN 55022: 1998, Class A
- EN 55024: 1998
- EN 61000-3-2: 1995, Amendment A14: 2000
- EN 61000-3-3: 1995
- IEC 61000-4-2: 1995
- IEC 61000-4-3: 1995
- IEC 61000-4-4: 1995
- IEC 61000-4-5: 1995
- IEC 61000-4-6: 1996
- IEC 61000-4-8: 1993
- IEC 61000-4-11: 1994
- AS/NZS 3548: 1995, Class A, Amendment 1: 1997, Amendment 2: 1997

Warning This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC PART 15 NOTICE

This section provides RF interference information for the user.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio

communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at one's own expense.

Warning Changes or modifications to the device that are not approved by the party responsible for compliance could void the user's authority to operate the equipment.

TELECOM

This section lists standards compliance for products that connect to ISDN lines.

- Administrative Council for Terminal Attachments (ACTA) Customer Information.
- Canadian Department of Communications Notice.
- CE CTR4
- JATE certification number C01-0361JP

ACTA CUSTOMER INFORMATION

- 1 This equipment complies with Part 68 of the FCC rules, and the requirement adopted by the ACTA. On the cover of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX, made out to CLPISR-45023-DW-N. If requested, this information must be provided to the telephone company.
- 2 Applicable registration jack USOCs (Universal Service Order Codes) for the equipment is RJ48C.
- 3 A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See Installation Instructions for details.
- 4 If the SCOPIA 400 platform equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

- 5 The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.
 - 6 If trouble is experienced with the SCOPIA 400 platform equipment, for repairs or warranty information please contact RADVISION Inc. customer support at +1.201.529.4300 for information on service or repairs. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.
 - 7 Only RADVISION Inc. qualified service personnel may repair the equipment.
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**CANADIAN
DEPARTMENT OF
COMMUNICATIONS
NOTICE**

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above condition may not prevent degradation of service in some situations.

Repairs to some certified equipment should be made by an authorized maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the ground connections of the power utility, telephone lines and internal metallic water pipe platform, are connected together. This precaution may be particularly important in rural areas.

Warning Users should not attempt to make such connections themselves, but should contact the appropriate E1/T1/PRI electric inspection authority, or appropriate E1/T1/PRI electrician.

ENVIRONMENTAL COMPLIANCE

RADVISION complies with the following EU Directives:

- Restrictions on the Use of Hazardous Substances (RoHS) Directive 2002/95/EC
- Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC

Environmental Compliance