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Cisco AS5800 Universal Access Server Regulatory Compliance and Safety Information

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This publication provides international agency compliance, safety, and statutory information for wide-area network (WAN) interfaces used in the Cisco 5814 dial shelf and translations of the safety warnings in the *Cisco AS5800 Universal Access Server Hardware Installation Guide* and the *Cisco AS5800 Dial Shelf Card Guide* that ships with your access server.

Note This publication and the guides referred to above ship with your access server.

Note For regulatory and safety information pertaining to the Cisco 7206 router shelf, refer to the *Regulatory Compliance and Safety Information for the Cisco 7200 Series Routers*.

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If You Need More Information

For information regarding the Cisco AS5800 universal access server that is beyond the scope of this document or for additional general information, use the following resources:

- For Cisco AS5800 universal access server hardware installation information, refer to the *Cisco AS5800 Universal Access Server Hardware Installation Guide* (Document Number DOC-AS5800-HICG=) and *Cisco AS5800 Universal Access Server Dial Shelf Card Guide* (Document Number 787097=) that shipped with your system.
- For Cisco AS5800 universal access server software installation and configuration, refer to the *Cisco AS5800 Universal Access Server Software Installation and Configuration Guide* (The *Cisco AS5800 Universal Access Server Software Installation and Configuration Guide* will be replaced by the *Cisco AS5800 Universal Access Server Operation, Administration, Maintenance, and Provisioning Guide*, available later this year.)
- For regulatory and safety information pertaining to the Cisco 7206 router shelf, refer to the *Regulatory Compliance and Safety Information for the Cisco 7200 Series Routers* document (Part Number 78-3419-xx) that shipped with your Cisco 7206 router.
- To obtain general information about documentation, refer to the section Cisco Connection Online, page 31, or call customer service at 800 553-6387 or 408 526-7208. Customer service hours are 5:00 a.m. to 6:00 p.m. Pacific time, Monday through Friday (excluding Cisco-observed holidays). You can also send e-mail to cs-rep@cisco.com, or you can refer to the *Cisco Information Packet* that shipped with your system.
- Documentation CD-ROM
Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly. Therefore, it is probably more current than printed documentation.
- Ordering Documentation
Registered CCO users (see Cisco Connection Online, page 31) can order the Documentation CD-ROM and other Cisco Product documentation through our online Subscription Services at <http://www.cisco.com/cgi-bin/subcat/kaojump.cgi>.
Nonregistered CCO users (see Cisco Connection Online, page 31) can order documentation through a local account representative by calling Cisco's corporate headquarters (California, USA) at 408 526-4000 or, in North America, call 800 553-NETS (6387).
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We appreciate and value your comments.

- The Cisco IOS software running your system contains extensive features and functionality.
- For Cisco AS5800 universal access server software installation and configuration, refer to the *Cisco AS5800 Universal Access Server Software Installation and Configuration Guide* (The *Cisco AS5800 Universal Access Server Software Installation and Configuration Guide* will be replaced by the *Cisco AS5800 Universal Access Server Operation, Administration, Maintenance, and Provisioning Guide*, available later this year), or refer to the following modular configuration and modular command reference publications, as appropriate for your configuration:
 - *Configuration Fundamentals Configuration Guide*
 - *Configuration Fundamentals Command Reference*
 - *Dial Solutions Configuration Guide*
 - *Wide-Area Networking Configuration Guide*
 - *Wide-Area Networking Command Reference*
 - *Network Protocols Configuration Guide*
 - *Network Protocols Command Reference*
 - *Configuration Builder Getting Started Guide*
 - *Troubleshooting Internetworking Systems*
 - *Debug Command Reference*
 - *System Error Messages*
 - *Cisco IOS Software Command Summary*
 - *Cisco Management Information Base (MIB) User Quick Reference*
 - Other documents as appropriate for your Cisco IOS software release.

Cisco AS5800 Universal Access Server Overview

The Cisco AS5800 universal access server is a high-density, ISDN and modem WAN aggregation system that provides both digital and analog call termination. It is intended to be used in service provider dial point-of-presence (POP) or centralized enterprise dial environments.

The access server components include a Cisco 5814 dial shelf and a Cisco 7206 router shelf. An optional AC-input power shelf is also available. Dial shelf cards in the dial shelf communicate with a host router shelf over a dial shelf interconnect cable. This nonblocking interconnect supports 100-Mbps full-duplex data transfer.

The access server can be ordered to support either AC- or DC-input power. Included in the dial shelf is a blower assembly, filter module, and DC power entry modules. Also included in the bundled system are ingress trunk cards, modem cards, dial shelf controller cards, Flash memory PCMCIA cards, cables, and Cisco IOS software.

Figure 1 shows the Cisco AS5800 universal access server front view, and Figure 2 shows the rear view.

Figure 1 Cisco AS5800 Universal Access Server Fully Installed—Front View

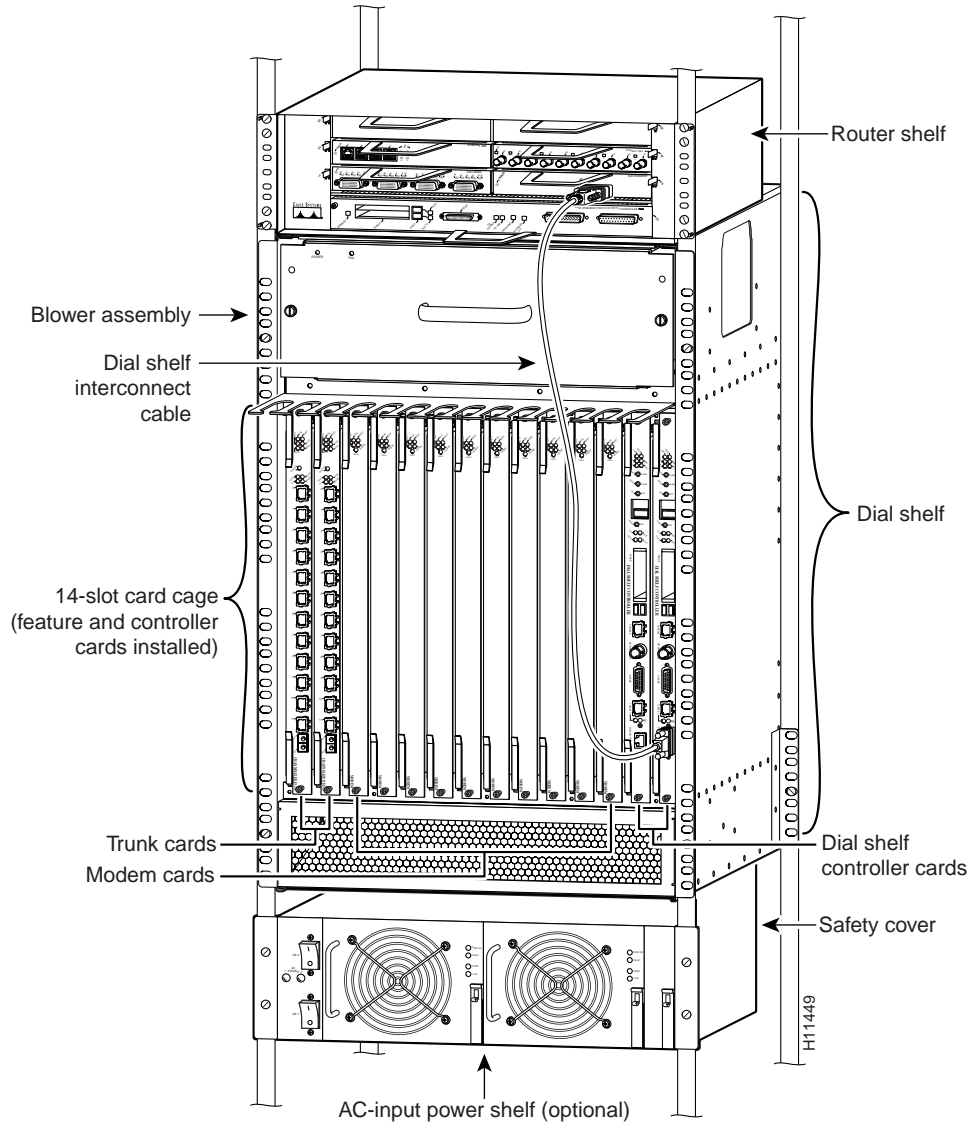
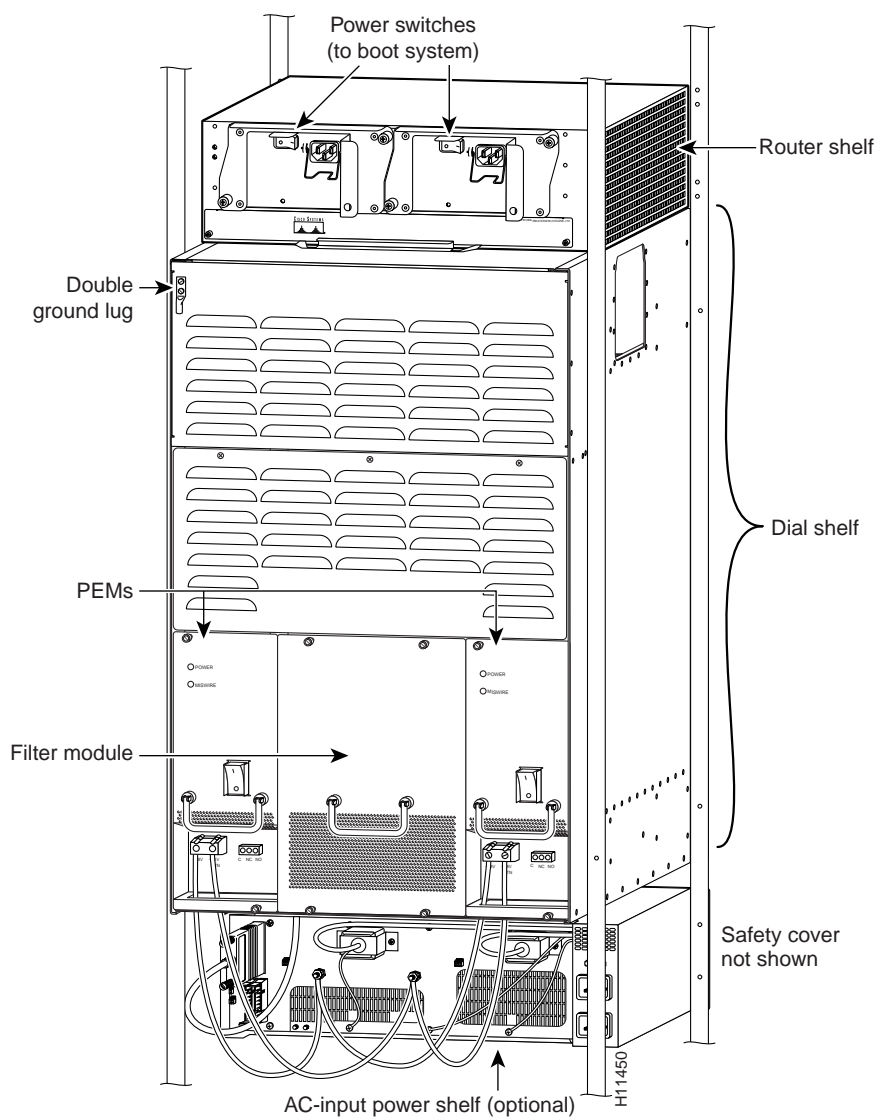


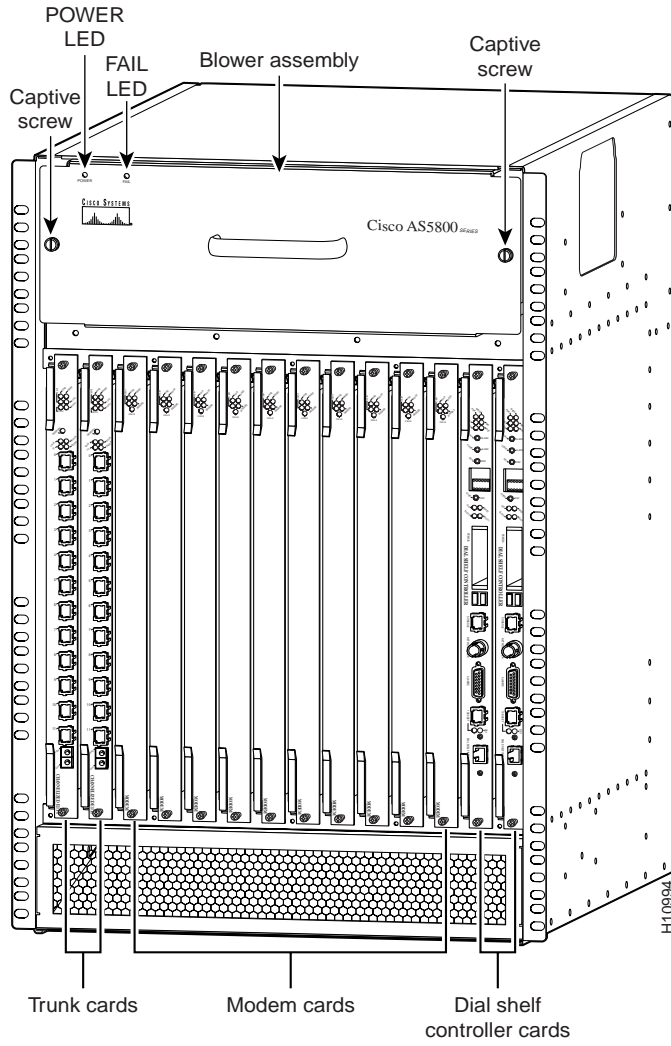
Figure 2 Cisco AS5800 Universal Access Server Fully Installed—Rear View



The Cisco AS5800 universal access server is equipped with channelized T1 (CT1), E1 (CE1), or T3 (CT3) ingress interfaces that provide a synchronous telecommunication interface in both North American and international environments. These ingress interfaces are installed in the Cisco 5814 dial shelf and contain all necessary functionality to terminate the telephone company connection. The channelized trunk card is configured in the factory for either T1 or E1 framing, depending on your order.

The Cisco AS5800 universal access server is also equipped with modem cards that recognize Point-to-Point Protocol (PPP) and Serial Line Interface Protocol (SLIP) framing and convert pulse code modulation (PCM) analog bitstreams to digital data. The modem card forwards converted and packetized data to the dial shelf main processor, which examines the data and forwards it to the router shelf. From the router shelf, the data is routed to an external network.

Figure 3 Cisco 5814 Dial Shelf with dial shelf Cards Installed



European Union (E.U.) Use Only—Cisco 5814 Dial Shelf

The following operating conditions are required within the European Community:

The ports labeled “Network Clock,” “10BaseT,” “Dial Shelf Interconnect,” “Console,” and “Alarms” are safety extra-low voltage (SELV) circuits. SELV circuits should only be connected to other SELV circuits. Because the E1/T1 circuits are treated like telephone-network voltage, avoid connecting the SELV circuit to the telephone network voltage (TNV) circuits.

Other usage will invalidate any approval given to this apparatus if as a result it ceases to comply with EN60950:1992.

Agency Approvals—Cisco 5814 Dial Shelf

Following are the agency approvals for the Cisco 5814 dial shelf:

- Safety: UL 1950, CSA 22.2 No. 950, EN60950, AUSTEL TS001, AS/NZS 3260, IEC 950
- Emissions: CFR 47 Part 15 Class A (FCC), CISPR22 Class B, EN55022 Class B, AS/NRZ 3548 Class B, ICES003, VCCI Class B
- Immunity: IEC 1000-3-2, IEC 1000-3-3, IEC-1000-4-2, IEC-1000-4-3, IEC-1000-4-4, IEC-1000-4-5, IEC-1000-4-6, IEC-1000-4-11, EN50082-1, EN50082-2

The CE marking on the chassis rear panel signifies that the Cisco 5814 chassis meets the following European Directives: 73/23/EEC and 89/336/EEC. The marking is shown in Figure 4.

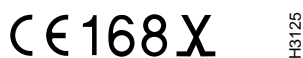
Figure 4 CE Marking



European Community Requirements

The CE168 marking on the channelized E1 trunk card signifies that the CE1 trunk card meets the following European Community directives and standards. The marking is shown in Figure 5.

Figure 5 CE168 Marking



The BAPT 607122 marking on the channelized E1 trunk card signifies that the CE1 trunk card meets the United Kingdom’s requirements for unbalanced 75-ohm E1 support as specified in NTR4 (PD7024:1995) standards. The following operating conditions are required within the European Community:

Except for Australia, the channelized E1 trunk card is designated SELV within the scope of EN60950:1992.



The ports labeled “Network Clock,” “10BaseT,” “Dial Shelf Interconnect,” “Console,” and “Alarms” are safety extra-low voltage (SELV) circuits. SELV circuits should only be connected to other SELV circuits. Because the E1/T1 circuits are treated like telephone-network voltage, avoid connecting the SELV circuit to the telephone network voltage (TNV) circuits.

Other usage will invalidate any approval given to this apparatus if as a result it ceases to comply with EN60950:1992.

United States and Canadian Requirements

The channelized T1 trunk card meets the United States requirements for T1 support as specified in FCC Part 68 standards.

The channelized T1 trunk card meets Canadian requirements for T1 support as specified in CP-01 standards.

Safety Requirements

Australia

This customer equipment is to be installed and maintained by service personnel as defined by AS/NZ3260 clause 1.2.14.3 Service Personnel. Incorrect connection of connected equipment to the General Purpose Outlet could result in a hazardous situation.

Safety requirements are not fulfilled unless the equipment is connected to a wall socket outlet with protective earth contact.

Europe

The channelized T1 trunk card meets Pan-Euro requirements for T1 support as specified in CE-0168-X standards.

The channelized E1 trunk card meets United Kingdom (UK) requirements for E1 support as specified in 607122 standards.

Japan

The channelized T1 trunk card meets Japan requirements for T1 support as specified in JATE T98-6304-0 standards.

The channelized E1 trunk card meets Japan requirements for E1 support as specified in JATE N98-N019-0 standards.

Singapore

The channelized E1 trunk card meets Singapore requirements for E1 support as specified in ISDN2-IPTA-AE 0345-98 and DLCN1-MBPS-AO-0344-98 standards.

Scandinavia

The channelized E1 trunk card meets Sweden requirements for E1 support as specified in 98031130 standards.

Safety Guidelines

This section provides safety guidelines to help you avoid injury to yourself and avoid damage to the equipment. The following safety guidelines are recommended when working with any equipment that connects to electrical power or telephone wiring:

- Locate the emergency power-off switch for the room in which you are working before beginning any procedures requiring access to the chassis interior.
- Disconnect all power and external cables before moving a chassis.
- Never work alone if potentially hazardous conditions exist.
- Never assume that power has been disconnected from a circuit; always check.
- Never perform any action that creates a potential hazard to people or makes the equipment unsafe.
- Carefully examine your work area for possible hazards such as moist floors, ungrounded power extension cables, and missing safety grounds.
- A 60-ampere DC circuit breaker is recommended for the input DC power source. This circuit breaker should protect against short-circuit and overcurrent faults in accordance with United States National Electrical Code NFPA 70 (United States), Canadian Electrical Code, part I, C22.1 (Canada), and IEC 364 (other countries).
- Only a DC power source that complies with the safety extra-low voltage (SELV) requirements in UL1950, CSA 950, EN 60950, and IEC950 can be connected to the DC-input power supply.
- A readily accessible disconnect device must be incorporated in the fixed wiring.
- This unit is to be installed in a restricted access area in accordance with articles 110-16, 110-17, and 110-18 of the National Electric Code, ANSI/NFPA 70, and IEC 950.

Telephone Wiring Guidelines

The following guidelines are recommended when working with any equipment that is connected to telephone wiring or to other network cabling:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Always use caution when installing or modifying telephone lines.

If you have any doubt as to how to safely install a system component correctly in a Cisco 5814 dial shelf, please contact a qualified telecommunications engineer.

Lifting Safety

A fully configured dial shelf weighs approximately 278 lb (126.1 kg). The chassis is not intended to be moved frequently. Before you install the dial shelf, ensure your site is properly prepared, so you can avoid having to move the chassis to accommodate power sources and network connections. (See the *Cisco AS5800 Universal Access Server Hardware Installation Guide* for site requirement guidelines.)

Note If you plan to install the chassis without using a forklift, you must first remove the blower assembly, dial shelf cards, and dial shelf controller cards from the chassis, and have someone assist you with the installation.

Whenever you lift any heavy components manually, follow these guidelines:

- Always have a second person available to help lift the component; never lift the component alone.
- Ensure that your footing is solid and balance the weight of the object between your feet.
- Lift the chassis slowly; never move suddenly or twist your body as you lift.
- Keep your back straight and lift with your legs, not your back. If you must bend down to lift the assembly, bend at the knees, not at the waist, to reduce the strain on your lower back muscles.

Note Consider the total weight of the system to be lifted and calculate at least one person for every 60 lb of weight.

Dial Shelf Card Safety Recommendations

You must follow these safety instructions when installing T1, E1, or T3 trunk cards in a Cisco 5814 dial shelf. Failure to install dial shelf cards in accordance with these instructions will invalidate the approval.

- The dial shelf card might contain safety extra-low voltage (SELV) circuitry. Ensure that attachments at the interconnection ports of the apparatus are also SELV circuits. (SELV circuits are so designed and protected that, under both normal conditions and likely fault conditions, the voltage that can be drawn is not hazardous.)
- Do not work on the system or connect and disconnect cables during a lightning storm.

Note The host chassis should always be connected to earth ground during normal use.

- The the dial shelf card gets hot during operation, refer to the card handling warning, page 26.

If you have any doubt as to how to safely install a system component correctly in a Cisco 5814 dial shelf, please contact a qualified telecommunications engineer.

General Installation Requirements

This section describes the general installation requirements for any dial shelf card installed in a Cisco 5814 dial shelf.

Where applicable, each trunk card and modem card is approved only for installation in a host and with host attachments, which are either **type approved** for such apparatus or covered by a **General Approval**. Clearance and creepage distances of X millimeters (mm) and Y mm, as listed in Table 1, must be maintained between the dial shelf card and other parts of the host, including any other dial shelf cards.

Creepage distance is defined as the minimum distance between two points (following the contour of the insulator) measured across the surface of an insulator. Clearance distance is defined as the minimum distance between two points (line of sight) measured in air.

Table 1 Creepage and Clearance Distances Based on Voltage

Voltage Used or Generated by Other Parts of the Host or dial shelf Card (Vrms ¹ or VDC ²)	Creepage (Y mm) ³	Clearance (X mm)
Up to 50	2.4 (3.8)	2.0
Up to 125	3.0 (4.8)	2.6
Up to 250	5.0 (8.0)	4.0
Up to 300 ⁴	6.4 (10.0)	4.0

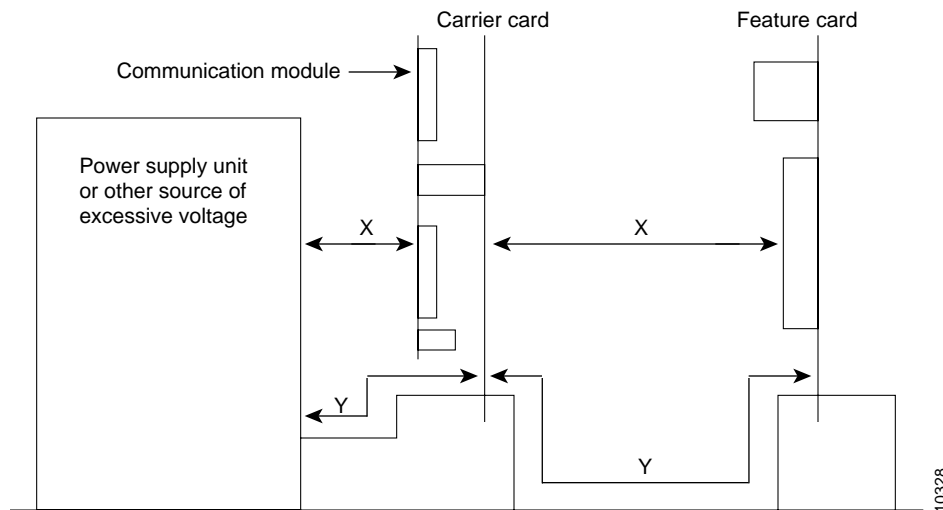
1. Vrms = root mean square voltage.

2. VDC = volts direct current.

3. The creepage distances not in parentheses apply when the equipment is installed in a normal office environment. The larger dimensions, given in parentheses, must be applied when the equipment is installed in an environment in which dust and other types of pollution could conduct electricity because of the effects of dampness and condensation. This applies to locations subject to high humidity.

4. For working voltages exceeding 300V, consult a competent telecommunications engineer prior to installation.

Clearance and creepage distances are measured between adjacent parts, as shown in Figure 6.

Figure 6 Creepage and Clearance Distance Measurements

Note that in Figure 6, X indicates the clearance distances between the cards and between adjacent cards and components, and Y shows the creepage path across the surface of an insulator and between the two points indicated by X.

Translated Safety Warnings

This section repeats in multiple languages the warnings in the *Cisco AS5800 Universal Access Server Hardware Guide* and *Cisco AS5800 Universal Access Server Operation, Administration, Maintenance, and Provisioning Guide* publications. In addition, this section contains translated warnings that can be used with other documentation related to the Cisco AS5800 universal access server.

Warning Definition

Safety warnings appear throughout the *Cisco AS5800 Universal Access Server Hardware Installation and Configuration Guide* in procedures that, if performed incorrectly, may harm you. A warning symbol precedes each warning statement.



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

Waarschuwing Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van standaard maatregelen om ongelukken te voorkomen.

Varoitus Tämä varoitusmerkki merkitsee vaaraa. Olet tilanteessa, joka voi johtaa ruumiinvammaan. Ennen kuin työskentelet minkään laitteiston parissa, ota selvää sähkökytkentöihin liittyvistä vaaroista ja tavanomaisista onnettomuuksien ehkäisykeinoista.

Attention Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant causer des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers posés par les circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents.

Warnung Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu einer Körperverletzung führen könnte. Bevor Sie mit der Arbeit an irgendeinem Gerät beginnen, seien Sie sich der mit elektrischen Stromkreisen verbundenen Gefahren und der Standardpraktiken zur Vermeidung von Unfällen bewusst.

Avvertenza Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di lavorare su qualsiasi apparecchiatura, occorre conoscere i pericoli relativi ai circuiti elettrici ed essere al corrente delle pratiche standard per la prevenzione di incidenti.

Advarsel Dette varselsymboler betyr fare. Du befinner deg i en situasjon som kan føre til personskade. Før du utfører arbeid på utstyr, må du være oppmerksom på de faremomentene som elektriske kretser innebærer, samt gjøre deg kjent med vanlig praksis når det gjelder å unngå ulykker.

Aviso Este símbolo de aviso indica perigo. Encontra-se numa situação que lhe poderá causar danos físicos. Antes de começar a trabalhar com qualquer equipamento, familiarize-se com os perigos relacionados com circuitos eléctricos, e com quaisquer práticas comuns que possam prevenir possíveis acidentes.

¡Advertencia! Este símbolo de aviso significa peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considerar los riesgos que entraña la corriente eléctrica y familiarizarse con los procedimientos estándar de prevención de accidentes.

Warning! Denna varningssymbol signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanligt förfarande för att förebygga skador.

Chassis Warning—Disconnecting Telephone-Network Cables



Warning Before opening the chassis, disconnect the telephone-network cables to avoid contact with telephone-network voltages.

Waarschuwing Voordat u het frame opent, dient u de verbinding met het telefoonnetwerk te verbreken door de kabels te ontkoppelen om zo contact met telefoonnetwerk-spanningen te vermijden.

Varoitus Vältä joutumista kosketuksiin puhelinverkostojännitteiden kanssa irrottamalla puhelinverkon kaapelit ennen asennuspohjan aukaisemista.

Attention Avant d'ouvrir le châssis, débrancher les câbles du réseau téléphonique afin d'éviter tout contact avec les tensions d'alimentation du réseau téléphonique.

Warnung Bevor Sie das Chassis öffnen, ziehen Sie die Telefonnetzkabel aus der Verbindung, um Kontakt mit Telefonnetzspannungen zu vermeiden.

Avvertenza Prima di aprire il telaio, scollegare i cavi della rete telefonica per evitare di entrare in contatto con la tensione di rete.

Advarsel Før kabinettet åpnes, skal kablene for telenettet kobles fra for å unngå å komme i kontakt med spenningen i telenettet.

Aviso Antes de abrir o chassis, desligue os cabos da rede telefónica para evitar contacto com a tensão da respectiva rede.

¡Advertencia! Antes de abrir el chasis, desconectar el cableado dirigido a la red telefónica para evitar contacto con voltajes de la propia red.

Varning! Koppla loss ledningarna till telefonnätet innan du öppnar chassit så att kontakten med telefonnätsspänningen bryts.

Lightning Activity Warning



Warning Do not work on the system or connect or disconnect cables during periods of lightning activity.

Waarschuwing Tijdens onweer dat gepaard gaat met bliksem, dient u niet aan het systeem te werken of kabels aan te sluiten of te ontkoppelen.

Varoitus Älä työskentele järjestelmän parissa äläkä yhdistä tai irrota kaapeleita ukkosilmalla.

Attention Ne pas travailler sur le système ni brancher ou débrancher les câbles pendant un orage.

Warnung Arbeiten Sie nicht am System und schließen Sie keine Kabel an bzw. trennen Sie keine ab, wenn es gewittert.

Avvertenza Non lavorare sul sistema o collegare oppure scollegare i cavi durante un temporale con fulmini.

Advarsel Utfør aldri arbeid på systemet, eller koble kabler til eller fra systemet når det tordner eller lynr.

Aviso Não trabalhe no sistema ou ligue e desligue cabos durante períodos de mau tempo (trovoada).

¡Advertencia! No operar el sistema ni conectar o desconectar cables durante el transcurso de descargas eléctricas en la atmósfera.

Varning! Vid åska skall du aldrig utföra arbete på systemet eller ansluta eller koppla loss kablar.

Chassis Lifting Warning



Warning Two people are required to lift the chassis. Use the handles on the chassis sides. To prevent injury, keep your back straight and lift with your legs, not your back. To prevent damage to the chassis and components, never attempt to lift the chassis with the handles on the power supplies, the filter module, or on the blower assembly. These handles are not designed to support the weight of the chassis.

Waarschuwing Twee mensen zijn vereist om de chassis op te tillen. Gebruik de hendels aan de chassiskanten. Om letsel te vermijden, dient u uw rug recht te houden en met uw benen te tillen, niet met uw rug. Om schade aan het chassis en de componenten te voorkomen, dient u het chassis nooit aan de hendels van de stroomvoorzieningen, de filtermodule of de ventilatormontage op te tillen. Deze hendels zijn niet ontworpen om het gewicht van het chassis te dragen.

Varoitus Runkoa nostettaessa tarvitaan kaksi henkilöä. Runko on nostettava sen sivuilla olevista kahvoista. Loukkaantumisen välttämiseksi on selkä pidettävä suorana ja nostamisen on tapahduttava jalkojen, ei selän avulla. Jotta runko ja sen osat eivät vahingoittuisi, runkoa ei saa koskaan nostaa virtalähteissä, suodatinmoduulissa tai puhaltimessa olevien kahvojen avulla. Näitä kahvoja ei ole tarkoitettu kestäämään rungon painoa.

Avertissement le châssis doit être soulevé par deux personnes. Saisissez-le par les poignées latérales. Pour éviter tout accident, soulevez le châssis en poussant sur vos jambes, le dos droit. Pour ne pas endommager le châssis ou ses composants, ne soulevez pas l'ensemble par les poignées des blocs d'alimentation, du module de filtrage ou du ventilateur ; celles-ci ne sont pas conçues pour supporter le poids du châssis.

Warnung Zum Anheben des Chassis sind zwei Personen erforderlich. Benutzen Sie die Handgriffe an den Seiten des Chassis. Um Verletzungen zu vermeiden, halten Sie Ihren Rücken gerade, und heben Sie das Chassis aus Beinen und Knien heraus an, nicht aus dem Rücken heraus. Um Beschädigungen des Chassis und der Komponenten zu vermeiden, achten Sie darauf, das Chassis nicht an den Handgriffen der Netzteile, des Filtermoduls oder des Gebläse anzuheben. Diese Handgriffe sind nicht stabil genug, das Gewicht des Chassis zu tragen.

Avvertenza Sono necessarie due persone per sollevare lo chassis. Usare le maniglie sui lati. Per evitare incidenti, mantenere diritta la schiena e sollevare lo chassis piegando le gambe, non la schiena. Per evitare di danneggiare lo chassis o i suoi componenti, non tentare di sollevarlo con le maniglie poste sugli alimentatori, sul modulo del filtro, o sulla ventola. Queste maniglie non sono state costruite per sostenere il peso dello chassis.

Advarsel! Det kreves to personer til å løfte kabinettet. Bruk håndtakene på siden av kabinettet. For å unngå personskade; hold ryggen rett og løft med bena og ikke ryggen. For å unngå skade på kabinettet og komponentene, ikke løft kabinettet etter håndtakene på strømforsyningen, filtermodulen eller vifteenheter. Disse håndtakene er ikke beregnet på å bære vekten av kabinettet.

Aviso São necessárias duas pessoas para levantar o chassis. Use as alças nas laterais do chassis. Para evitar ferimentos, mantenha suas costas eretas e erga-se com as pernas e não com as costas. Para evitar dano ao chassis e seus componentes, nunca tente levantar o chassi com as alças das fontes de alimentação, do módulo do filtro ou da montagem do ventilador. Estas alças não foram concebidas para suportar o peso do chassis.

Aviso Para levantar el chasis se necesitan dos personas. Use las agarraderas situadas a los lados del chasis. Para impedir lesiones, mantenga la espalda recta y levante el peso con las piernas y no con la espalda. Para impedir dañar el chasis y sus componentes, nunca intente levantar el chasis con las agarraderas de las fuentes de alimentación, del módulo de filtro, ni del conjunto de ventilación. Estas agarraderas no están diseñadas para soportar el peso del chasis.

Warning! Det behövs två personer till att lyfta chassit. Använd handtagen på chassits sidor. Undvik kroppskada genom att hålla ryggen rak och lyfta med benen, inte med ryggen. Undvik att chassit och dess komponenter skadas genom att aldrig försöka lyfta chassit med handtagen på strömförsörjningsenheterna, filtermodulen eller på fläkten. Dessa handtag är inte avsedda att bära upp chassits vikt.

Installation Warning



Warning Read the installation instructions before you connect the system to its power source.

Waarschuwing Raadpleeg de installatie-aanwijzingen voordat u het systeem met de voeding verbindt.

Varoitus Lue asennusohjeet ennen järjestelmän yhdistämistä virtalähteeseen.

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

Warnung Lesen Sie die Installationsanweisungen, bevor Sie das System an die Stromquelle anschließen.

Avvertenza Consultare le istruzioni di installazione prima di collegare il sistema all'alimentatore.

Advarsel Les installasjonsinstruksjonene før systemet kobles til strømkilden.

Aviso Leia as instruções de instalação antes de ligar o sistema à sua fonte de energia.

¡Advertencia! Ver las instrucciones de instalación antes de conectar el sistema a la red de alimentación.

Warning! Läs installationsanvisningarna innan du kopplar systemet till dess strömförsörjningsenhet.

Chassis Warning—Rack-Mounting and Servicing



Warning To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- This unit should be mounted at the bottom of the rack if it is the only unit in the rack.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
- If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.

Waarschuwing Om lichamelijk letsel te voorkomen wanneer u dit toestel in een rek monteert of het daar een servicebeurt geeft, moet u speciale voorzorgsmaatregelen nemen om ervoor te zorgen dat het toestel stabiel blijft. De onderstaande richtlijnen worden verstrekt om uw veiligheid te verzekeren:

- Dit toestel dient onderaan in het rek gemonteerd te worden als het toestel het enige in het rek is.
- Wanneer u dit toestel in een gedeeltelijk gevuld rek monteert, dient u het rek van onderen naar boven te laden met het zwaarste onderdeel onderaan in het rek.
- Als het rek voorzien is van stabiliseringshulpmiddelen, dient u de stabilisatoren te monteren voordat u het toestel in het rek monteert of het daar een servicebeurt geeft.

Varoitus Kun laite asetetaan telineeseen tai huolletaan sen ollessa telineessä, on noudatettava erityisiä varotoimia järjestelmän vakavuuden säilyttämiseksi, jotta vältytään loukkaantumiselta. Noudata seuraavia turvallisuusohjeita:

- Jos telineessä ei ole muita laitteita, aseta laite telineen alaosaan.
- Jos laite asetetaan osaksi täytettyyn telineeseen, aloita kuormittaminen sen alaosaan kaikkein raskaimmalla esineellä ja siirry sitten sen yläosaan.
- Jos telinettä varten on vakaimet, asenna ne ennen laitteen asettamista telineeseen tai sen huoltamista siinä.

Attention Pour éviter toute blessure corporelle pendant les opérations de montage ou de réparation de cette unité en casier, il convient de prendre des précautions spéciales afin de maintenir la stabilité du système. Les directives ci-dessous sont destinées à assurer la protection du personnel :

- Si cette unité constitue la seule unité montée en casier, elle doit être placée dans le bas.
- Si cette unité est montée dans un casier partiellement rempli, charger le casier de bas en haut en plaçant l'élément le plus lourd dans le bas.

- Si le casier est équipé de dispositifs stabilisateurs, installer les stabilisateurs avant de monter ou de réparer l'unité en casier.

Warnung Zur Vermeidung von Körperverletzung beim Anbringen oder Warten dieser Einheit in einem Gestell müssen Sie besondere Vorkehrungen treffen, um sicherzustellen, daß das System stabil bleibt. Die folgenden Richtlinien sollen zur Gewährleistung Ihrer Sicherheit dienen:

- Wenn diese Einheit die einzige im Gestell ist, sollte sie unten im Gestell angebracht werden.
- Bei Anbringung dieser Einheit in einem zum Teil gefüllten Gestell ist das Gestell von unten nach oben zu laden, wobei das schwerste Bauteil unten im Gestell anzubringen ist.
- Wird das Gestell mit Stabilisierungszubehör geliefert, sind zuerst die Stabilisatoren zu installieren, bevor Sie die Einheit im Gestell anbringen oder sie warten.

Avvertenza Per evitare infortuni fisici durante il montaggio o la manutenzione di questa unità in un supporto, occorre osservare speciali precauzioni per garantire che il sistema rimanga stabile. Le seguenti direttive vengono fornite per garantire la sicurezza personale:

- Questa unità deve venire montata sul fondo del supporto, se si tratta dell'unica unità da montare nel supporto.
- Quando questa unità viene montata in un supporto parzialmente pieno, caricare il supporto dal basso all'alto, con il componente più pesante sistemato sul fondo del supporto.
- Se il supporto è dotato di dispositivi stabilizzanti, installare tali dispositivi prima di montare o di procedere alla manutenzione dell'unità nel supporto.

Advarsel Unngå fysiske skader under montering eller reparasjonsarbeid på denne enheten når den befinner seg i et kabinett. Vær nøye med at systemet er stabilt. Følgende retningslinjer er gitt for å verne om sikkerheten:

- Denne enheten bør monteres nederst i kabinettet hvis dette er den eneste enheten i kabinettet.
- Ved montering av denne enheten i et kabinett som er delvis fylt, skal kabinettet lastes fra bunnen og opp med den tyngste komponenten nederst i kabinettet.
- Hvis kabinettet er utstyrt med stabiliseringsutstyr, skal stabilisatorene installeres før montering eller utføring av reparasjonsarbeid på enheten i kabinettet.

Aviso Para se prevenir contra danos corporais ao montar ou reparar esta unidade numa estante, deverá tomar precauções especiais para se certificar de que o sistema possui um suporte estável. As seguintes directrizes ajudá-lo-ão a efectuar o seu trabalho com segurança:

- Esta unidade deverá ser montada na parte inferior da estante, caso seja esta a única unidade a ser montada.
- Ao montar esta unidade numa estante parcialmente ocupada, coloque os itens mais pesados na parte inferior da estante, arrumando-os de baixo para cima.
- Se a estante possuir um dispositivo de estabilização, instale-o antes de montar ou reparar a unidade.

¡Advertencia! Para evitar lesiones durante el montaje de este equipo sobre un bastidor, o posteriormente durante su mantenimiento, se debe poner mucho cuidado en que el sistema quede bien estable. Para garantizar su seguridad, proceda según las siguientes instrucciones:

- Colocar el equipo en la parte inferior del bastidor, cuando sea la única unidad en el mismo.
- Cuando este equipo se vaya a instalar en un bastidor parcialmente ocupado, comenzar la instalación desde la parte inferior hacia la superior colocando el equipo más pesado en la parte inferior.

- Si el bastidor dispone de dispositivos estabilizadores, instalar éstos antes de montar o proceder al mantenimiento del equipo instalado en el bastidor.

Warning! För att undvika kroppsskada när du installerar eller utför underhållsarbete på denna enhet på en ställning måste du vidta särskilda försiktighetsåtgärder för att försäkra dig om att systemet står stadigt. Följande riktlinjer ges för att trygga din säkerhet:

- Om denna enhet är den enda enheten på ställningen skall den installeras längst ned på ställningen.
- Om denna enhet installeras på en delvis fylld ställning skall ställningen fyllas nedifrån och upp, med de tyngsta enheterna längst ned på ställningen.
- Om ställningen är försedd med stabiliseringsdon skall dessa monteras fast innan enheten installeras eller underhålls på ställningen.

TN Power Warning



Warning The device is designed to work with TN power systems.

Waarschuwing Het apparaat is ontworpen om te functioneren met TN energiesystemen.

Varoitus Koje on suunniteltu toimimaan TN-sähkövoimajärjestelmien yhteydessä.

Attention Ce dispositif a été conçu pour fonctionner avec des systèmes d'alimentation TN.

Warnung Das Gerät ist für die Verwendung mit TN-Stromsystemen ausgelegt.

Avvertenza Il dispositivo è stato progettato per l'uso con sistemi di alimentazione TN.

Advarsel Utstyret er utfomet til bruk med TN-strømsystemer.

Aviso O dispositivo foi criado para operar com sistemas de corrente TN.

¡Advertencia! El equipo está diseñado para trabajar con sistemas de alimentación tipo TN.

Warning! Enheten är konstruerad för användning tillsammans med elkraftssystem av TN-typ.

Warning Statement for Norway and Sweden



Advarsel Apparatet skal kobles til en jordet stikkontakt.

Warning! Apparaten skall anslutas till jordat nätuttag.

Product Disposal Warning



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

Waarschuwing Dit produkt dient volgens alle landelijke wetten en voorschriften te worden afgedankt.

Varoitus Tämän tuotteen lopullisesta hävittämisestä tulee huolehtia kaikkia valtakunnallisia lakeja ja säännöksiä noudattaen.

Attention La mise au rebut définitive de ce produit doit être effectuée conformément à toutes les lois et réglementations en vigueur.

Warnung Dieses Produkt muß den geltenden Gesetzen und Vorschriften entsprechend entsorgt werden.

Avvertenza L'eliminazione finale di questo prodotto deve essere eseguita osservando le normative italiane vigenti in materia.

Advarsel Endelig disponering av dette produktet må skje i henhold til nasjonale lover og forskrifter.

Aviso A descartagem final deste produto deverá ser efectuada de acordo com os regulamentos e a legislação nacional.

¡Advertencia! El desecho final de este producto debe realizarse según todas las leyes y regulaciones nacionales.

Varning! Slutlig kassering av denna produkt bör skötas i enlighet med landets alla lagar och föreskrifter.

Ground Connection Warning



Warning When installing the unit, the ground connection must always be made first and disconnected last.

Waarschuwing Bij de installatie van het toestel moet de aardverbinding altijd het eerste worden gemaakt en het laatste worden losgemaakt.

Varoitus Laitetta asennettaessa on maahan yhdistäminen aina tehtävä ensiksi ja maadoituksen irti kytkeminen viimeiseksi.

Attention Lors de l'installation de l'appareil, la mise à la terre doit toujours être connectée en premier et déconnectée en dernier.

Warnung Der Erdanschluß muß bei der Installation der Einheit immer zuerst hergestellt und zuletzt abgetrennt werden.

Avvertenza In fase di installazione dell'unità, eseguire sempre per primo il collegamento a massa e disconnetterlo per ultimo.

Advarsel Når enheten installeres, må jordledningen alltid tilkobles først og frakobles sist.

Aviso Ao instalar a unidade, a ligação à terra deverá ser sempre a primeira a ser ligada, e a última a ser desligada.

¡Advertencia! Al instalar el equipo, conectar la tierra la primera y desconectarla la última.

Varning! Vid installation av enheten måste jordledningen alltid anslutas först och kopplas bort sist.

Jewelry Removal Warning



Warning Before working on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals.

Waarschuwing Alvorens aan apparatuur te werken die met elektrische leidingen is verbonden, sieraden (inclusief ringen, kettingen en horloges) verwijderen. Metalen voorwerpen worden warm wanneer ze met stroom en aarde zijn verbonden, en kunnen ernstige brandwonden veroorzaken of het metalen voorwerp aan de aansluitklemmen lassen.

Varoitus Ennen kuin työskentelet voimavirtajohtoihin kytkettyjen laitteiden parissa, ota pois kaikki korut (sormukset, kaulakorut ja kellot mukaan lukien). Metalliesineet kuumenevat, kun ne ovat yhteydessä sähkövirran ja maan kanssa, ja ne voivat aiheuttaa vakavia palovammoja tai hitsata metalliesineet kiinni liitäntänapoihin.

Attention Avant d'accéder à cet équipement connecté aux lignes électriques, ôter tout bijou (anneaux, colliers et montres compris). Lorsqu'ils sont branchés à l'alimentation et reliés à la terre, les objets métalliques chauffent, ce qui peut provoquer des blessures graves ou souder l'objet métallique aux bornes.

Warnung Vor der Arbeit an Geräten, die an das Netz angeschlossen sind, jeglichen Schmuck (einschließlich Ringe, Ketten und Uhren) abnehmen. Metallgegenstände erhitzen sich, wenn sie an das Netz und die Erde angeschlossen werden, und können schwere Verbrennungen verursachen oder an die Anschlußklemmen angeschweißt werden.

Avvertenza Prima di intervenire su apparecchiature collegate alle linee di alimentazione, togliersi qualsiasi monile (inclusi anelli, collane, braccialetti ed orologi). Gli oggetti metallici si riscaldano quando sono collegati tra punti di alimentazione e massa: possono causare ustioni gravi oppure il metallo può saldarsi ai terminali.

Advarsel Fjern alle smykker (inkludert ringer, halskjeder og klokker) før du skal arbeide på utstyr som er koblet til kraftledninger. Metallgjenstander som er koblet til kraftledninger og jord blir svært varme og kan forårsake alvorlige brannskader eller smelte fast til polene.

Aviso Antes de trabalhar em equipamento que esteja ligado a linhas de corrente, retire todas as jóias que estiver a usar (incluindo anéis, fios e relógios). Os objectos metálicos aquecerão em contacto com a corrente e em contacto com a ligação à terra, podendo causar queimaduras graves ou ficarem soldados aos terminais.

¡Advertencia! Antes de operar sobre equipos conectados a líneas de alimentación, quitarse las joyas (incluidos anillos, collares y relojes). Los objetos de metal se calientan cuando se conectan a la alimentación y a tierra, lo que puede ocasionar quemaduras graves o que los objetos metálicos queden soldados a los bornes.

Warning! Tag av alla smycken (inklusive ringar, halsband och armbandsur) innan du arbetar på utrustning som är kopplad till kraftledningar. Metallobjekt hettas upp när de kopplas ihop med ström och jord och kan förorsaka allvarliga brännskador; metallobjekt kan också sammansvetsas med kontaktarna.

Qualified Personnel Warning



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

Waarschuwing Installatie en reparaties mogen uitsluitend door getraind en bevoegd personeel uitgevoerd worden.

Varoitus Ainoastaan koulutettu ja pätevä henkilökunta saa asentaa tai vaihtaa tämän laitteen.

Avertissement Tout installation ou remplacement de l'appareil doit être réalisé par du personnel qualifié et compétent.

Achtung Gerät nur von geschultem, qualifiziertem Personal installieren oder auswechseln lassen.

Avvertenza Solo personale addestrato e qualificato deve essere autorizzato ad installare o sostituire questo apparecchio.

Advarsel Kun kvalifisert personell med riktig opplæring bør montere eller bytte ut dette utstyret.

Aviso Este equipamento deverá ser instalado ou substituído apenas por pessoal devidamente treinado e qualificado.

¡Atención! Estos equipos deben ser instalados y reemplazados exclusivamente por personal técnico adecuadamente preparado y capacitado.

Varning Denna utrustning ska endast installeras och bytas ut av utbildad och kvalificerad personal.

Supply Circuit Warning



Warning Care must be given to connecting units to the supply circuit so that wiring is not overloaded.

Waarschuwing Let erop dat de toestellen op voedingscircuits worden aangesloten zonder het vermogen van de bedrading te overschrijden.

Varoitus Laitteyksiköt on yhdistettävä huolellisesti syöttöpiiriin niin, että johdot eivät ole ylikuormitettuja.

Avertissement Veillez à bien connecter les unités au circuit d'alimentation afin de ne pas surcharger les connections.

Achtung Beim Anschließen der Geräte an das Stromnetz ist darauf zu achten, daß die Schaltverbindungen nicht überlastet werden.

Avvertenza Fare attenzione quando si collegano le unità al circuito di alimentazione, per non sovraccaricare i cablaggi.

Advarsel Vær nøye med å koble enheter til strømforsyningskretsen slik at ledningene ikke overbelastes.

Aviso Deverá ter precaução ao ligar unidades ao circuito de fornecimento de energia, para não sobrecarregar a instalação.

¡Atención! Poner mucho cuidado al conectar los equipos al circuito de alimentación a fin de no sobrecargar el cableado.

Warning Var noga vid anslutning av enheter till matarströmkretsen så att ledningarna inte överbelastas.

Power Cord Warning



Warning This unit has more than one power cord. To reduce the risk of electric shock, disconnect the two power supply cords before servicing the unit.

Waarschuwing Dit toestel heeft meer dan één netsnoer. Om het risico van een elektrische schok te verminderen, dient u de stekkers van de twee netsnoeren uit het stopcontact te halen voordat u het toestel een servicebeurt geeft.

Varoitus Tässä yksikössä on useampi kuin yksi liitäntäjohdin. Irrota molemmat virtalähteestä tulevat johtimet ennen laitteen huoltamista, jotta vältät sähköiskun vaaran.

Attention Cet appareil est muni de plusieurs cordons d'alimentation. Pour éviter les risques d'électrocution, débrancher les deux cordons d'alimentation avant de procéder à l'entretien/dépannage de l'appareil.

Warnung Diese Einheit hat mehr als ein Netzkabel. Zur Verringerung der Stromschlaggefahr trennen Sie beide Netzgerätekabel ab, bevor Sie die Einheit warten.

Avvertenza Questa unità utilizza più di un cavo di alimentazione. Per ridurre il rischio di scosse elettriche, scollegare i due cavi di alimentazione prima di procedere alla manutenzione dell'unità.

Advarsel Denne enheten har mer enn én strømledning. Kople fra begge strømledningene før du vedlikeholder enheten, slik at du reduserer faren for elektrisk støt.

Aviso Esta unidade tem mais de um cabo de alimentação. Para reduzir o risco de choque eléctrico, desligue os dois cabos de alimentação antes de efectuar reparações na unidade.

¡Advertencia! Este equipo posee más de un cable de alimentación. Para reducir el riesgo de descarga eléctrica, desenchufar los dos cables antes de proceder al mantenimiento de la unidad.

Warning! Denna enhet har mer än en nätsladd. För att minska risken för elektriska stötar skall båda nätsladdarna dras ur innan du utför underhållsarbete på enheten.

Hazardous Voltages in WAN Ports



Warning Hazardous network voltages are present in WAN ports regardless of whether power to the unit is OFF or ON. To avoid electric shock, use caution when working near WAN ports. When detaching cables, detach the end away from the unit first. Warning

Waarschuwing Er is gevaarlijke netwerkspanning aanwezig in WAN poorten ongeacht of de stroom naar de router INGESCHAKELD of UITGESCHAKELD is. Om elektrische schokken te vermijden, dient u voorzichtig te werk te gaan wanneer u in de nabijheid van WAN poorten werkt. Wanneer u kabels losmaakt, dient u eerst het uiteinde dat zich het verst van de eenheid vandaan bevindt, te verwijderen.

Varoitus WAN-porteissa on vaarallisia verkkojännitteitä riippumatta siitä, onko yksikön virta kytketty vai ei. Välttyäksesi sähköiskulta ole varovainen työskennellessäsi WAN-porttien lähetyvillä. Kun irrotat kaapeleita, irrota yksiköstä kauimpana sijaitseva pää ensiksi.

Attention Les ports de réseau longue distance (WAN) gèrent des tensions de réseau dangereuses, que l'unité soit sous tension ou pas. Pour éviter tout risque d'électrocution, prenez toutes les précautions nécessaires avant de travailler à proximité des ports WAN. Pour déconnecter les câbles, commencez par débrancher l'extrémité la plus éloignée du routeur.

Warnung In WAN-Ports sind gefährliche Netzspannungen vorhanden, auch wenn der Strom zur Einheit abgeschaltet wurde. Zur Vermeidung von Elektroschock Vorsicht bei der Arbeit in der Nähe von WAN-Ports. Beim Abtrennen von Kabeln zuerst das vom Router entfernte Ende lösen.

Avvertenza Nelle porte WAN sono presenti tensioni di rete pericolose, sia che il sistema sia acceso o meno (ON od OFF). Per evitare scosse elettriche, fare attenzione quando si lavora in prossimità di porte WAN. Quando si scollegano cavi, staccare per primo il connettore collegato al router.

Advarsel! Det er livsfarlig nettverksspenning i WAN-utganger, uavhengig av om strømmen til enheten er slått av (OFF) eller på (ON). Vær forsiktig når du jobber nær WAN-utganger slik at du unngår elektrisk støt. Hvis du skal løsne kabler, må du først løsne den enden som er lengst borte fra fordelingsenheten.

Aviso Existem sempre tensões de rede perigosas nas portas WAN, independentemente da corrente para a unidade estar desligada (OFF) ou ligada (ON). Para evitar choques eléctricos, tenha o devido cuidado ao trabalhar junto das portas WAN. Ao desconectar os cabos, separe primeiro a extremidade do cabo que se encontra ligada à unidade.

¡Advertencia! En los puertos de redes de área extendida (WAN) existen tensiones de red peligrosas, tanto si la unidad está conectada como si está desconectada. Para evitar descargas eléctricas, proceda con precaución cuando trabaje cerca de los puertos WAN. Para desconectar los cables, desconecte primero el extremo que va a la unidad.

Warning! Farlig nätverksspänning föreligger i WAN-portarna oavsett om strömförsörjningen till enheten är bruten eller ej. För att undvika elektriska stötar ska du vara försiktig vid arbete i närheten av dessa portar. När du kopplar bort en kabel ska du först koppla bort den ände som inte är ansluten till enheten.

Ground Conductor Warning



Warning Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available.

Waarschuwing De aardingsleiding mag nooit buiten werking gesteld worden en de apparatuur mag nooit bediend worden zonder dat er een op de juiste wijze geïnstalleerde aardingsleiding aanwezig is. Neem contact op met de bevoegde instantie voor elektrische inspecties of met een electricien als u er niet zeker van bent dat er voor passende aarding gezorgd is.

Varoitus Älä koskaan ohita maajohdinta tai käytä laitteita ilman oikein asennettua maajohdinta. Ota yhteyttä asianmukaiseen sähkötarkastusviranomaiseen tai sähköasentajaan, jos olet epävarma maadoituksen sopivuudesta.

Attention Ne jamais rendre inopérant le conducteur de masse ni utiliser l'équipement sans un conducteur de masse adéquatement installé. En cas de doute sur la mise à la masse appropriée disponible, s'adresser à l'organisme responsable de la sécurité électrique ou à un électricien.

Warnung Auf keinen Fall den Erdungsleiter unwirksam machen oder das Gerät ohne einen sachgerecht installierten Erdungsleiter verwenden. Wenn Sie sich nicht sicher sind, ob eine sachgerechte Erdung vorhanden ist, wenden Sie sich an den zuständigen elektrischen Fachmann oder einen Elektriker.

Avvertenza Non escludere mai il conduttore di protezione né usare l'apparecchiatura in assenza di un conduttore di protezione installato in modo corretto. Se non si sa con certezza che è disponibile un collegamento di messa a terra adeguato, esaminare le Norme CEI pertinenti o rivolgersi a un elettricista qualificato.

Advarsel Omgå aldri jordingslederen og bruk aldri utstyret uten riktig montert jordingsleder. Ta kontakt med det riktige organet for elektrisk inspeksjon eller en elektriker hvis du er usikker på om det finnes velegnet jording.

Aviso Nunca anule o condutor à terra nem opere o equipamento sem ter um condutor à terra adequadamente instalado. Em caso de dúvida em relação ao sistema de ligação à terra, contacte os serviços locais de inspeção eléctrica ou um electricista qualificado.

¡Advertencia! No inhabilitar nunca el conductor de tierra ni hacer funcionar el equipo si no existe un conductor de tierra instalado correctamente. Póngase en contacto con una autoridad apropiada de inspección eléctrica o con un electricista competente si no está seguro de que hay una conexión a tierra adecuada.

Warning! Koppla aldrig från jordledningen och använd aldrig utrustningen utan en på lämpligt sätt installerad jordledning. Om det föreligger osäkerhet huruvida lämplig jordning finns skall elektrisk besiktningsauktoriteten eller elektriker kontaktas.

AC-Input Power Shelf Safety Cover Warning



Warning The safety cover is an integral part of the product. Do not operate the unit without the safety cover installed. Operation of the unit without the safety cover in place will invalidate the safety approvals and pose a risk of fire and electrical hazards.

Waarschuwing Het beveiligingsdeksel is een integraal onderdeel van het product. Deze eenheid niet bedienen als het beveiligingsdeksel niet geïnstalleerd is. Als het deksel niet op zijn plaats is tijdens de bediening, zal dit de veiligheidsaanbevelingen ongeldig maken en een risico op brand en elektrische gevaren vormen.

Varoitus Suojakansi on tärkeä osa tuotetta. Yksikköä ei saa käyttää ilman suojakanntta. Yksikön käyttö ilman suojakanntta mitätöi turvallisuushyväksynnät ja aiheuttaa tulipalon ja sähköiskun vaaran.

Attention Le plateau de sécurité est une partie intégrante du produit. Pour éviter tout risque de feu ou d'accident électrique, n'utilisez jamais l'unité lorsque ce plateau n'est pas installé. Les garanties de sécurité seraient annulées.

Warnung Die Sicherheitsabdeckung ist integraler Bestandteil des Produkts. Die Einheit darf nicht ohne installierte Sicherheitsabdeckung betrieben werden. Ein Betreiben der Einheit ohne korrekt installierte Abdeckung verstößt gegen die Sicherheitsnormen und führt zu Brandgefahr sowie elektrischen Sicherheitsrisiken.

Avvertenza Attenzione: Il pannello di sicurezza è parte integrante del prodotto. Non fate funzionare il sistema senza il pannello di sicurezza. Far funzionare il sistema senza il pannello invaliderà le certificazioni di sicurezza e può dare luogo a rischi di incendio e a cortocircuiti.

Advarsel O Dette sikkerhetsdekselet er en integral del av produktet. Enheten skal ikke brukes uten at sikkerhetsdekselet er montert. Bruk av enheten uten at sikkerhetsdekselet sitter på plass, vil ugyldiggjøre sikkerhetsgodkjenningene, og kan dessuten utgjøre fare for brann og faremomenter i forbindelse med elektrisitet.

Aviso A cobertura de segurança é uma parte integral do produto. Não opere a unidade sem a respectiva cobertura de segurança instalada. Operar a unidade sem esta cobertura anulará as aprovações de segurança e constituirá um risco de incêndio e perigo eléctrico.

¡Advertencia! La cubierta de seguridad forma parte integral del producto. No haga funcionar este producto sin la cubierta de seguridad instalada, de lo contrario se invalidarían las aprobaciones de seguridad y se correría el riesgo de incendio o descargas eléctricas.

Warning! Skyddshuven är en väsentlig del av produkten. Använd inte enheten utan installerad skyddshuv. Om enheten används utan skyddshuven på plats upphävs alla säkerhetsgodkännanden och risk för branffara och elektrisk fara föreligger.

SELV Circuit Warning



Warning To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors.

Waarschuwing Om elektrische schokken te vermijden, mogen veiligheidscircuits met extra lage spanning (genaamd SELV = Safety Extra-Low Voltage) niet met telefoonnetwerkspanning (TNV) circuits verbonden worden. LAN (Lokaal netwerk) poorten bevatten SELV circuits en WAN (Regionaal netwerk) poorten bevatten TNV circuits. Sommige LAN en WAN poorten gebruiken allebei RJ-45 connectors. Ga voorzichtig te werk wanneer u kabels verbindt.

Varoitus Jotta vältyt sähköiskulta, älä kytke pienjännitteisiä SELV-suojapiirejä puhelinverkkojännitettä (TNV) käyttöviin virtapiireihin. LAN-portit sisältävät SELV-piirejä ja WAN-portit puhelinverkkojännitettä käyttöviä piirejä. Osa sekä LAN- että WAN-porteista käyttää RJ-45-liittimiä. Ole varovainen kytkiessäsi kaapeleita.

Attention Pour éviter une électrocution, ne raccordez pas les circuits de sécurité basse tension (Safety Extra-Low Voltage ou SELV) à des circuits de tension de réseau téléphonique (Telephone Network Voltage ou TNV). Les ports du réseau local (LAN) contiennent des circuits SELV et les ports du réseau longue distance (WAN) sont munis de circuits TNV. Certains ports LAN et WAN utilisent des connecteurs RJ-45. Raccordez les câbles en prenant toutes les précautions nécessaires.

Warnung Zur Vermeidung von Elektroschock die Sicherheits-Kleinspannungs-Stromkreise (SELV-Kreise) nicht an Fernsprechnetzspannungs-Stromkreise (TNV-Kreise) anschließen. LAN-Ports enthalten SELV-Kreise, und WAN-Ports enthalten TNV-Kreise. Einige LAN- und WAN-Ports verwenden auch RJ-45-Steckverbinder. Vorsicht beim Anschließen von Kabeln.

Avvertenza Per evitare scosse elettriche, non collegare circuiti di sicurezza a tensione molto bassa (SELV) ai circuiti a tensione di rete telefonica (TNV). Le porte LAN contengono circuiti SELV e le porte WAN contengono circuiti TNV. Alcune porte LAN e WAN fanno uso di connettori RJ-45. Fare attenzione quando si collegano cavi.

Advarsel Unngå å koble lavspenningskretser (SELV) til kretser for telenettspenning (TNV), slik at du unngår elektrisk støt. LAN-utganger inneholder SELV-kretser og WAN-utganger inneholder TNV-kretser. Det finnes både LAN-utganger og WAN-utganger som bruker RJ-45-kontakter. Vær forsiktig når du kobler kabler.

Aviso Para evitar choques eléctricos, não conecte os circuitos de segurança de baixa tensão (SELV) aos circuitos de tensão de rede telefónica (TNV). As portas LAN contêm circuitos SELV e as portas WAN contêm circuitos TNV. Algumas portas LAN e WAN usam conectores RJ-45. Tenha o devido cuidado ao conectar os cabos.

¡Advertencia! Para evitar la sacudida eléctrica, no conectar circuitos de seguridad de voltaje muy bajo (safety extra-low voltage = SELV) con circuitos de voltaje de red telefónica (telephone network voltage = TNV). Los puertos de redes de área local (local area network = LAN) contienen circuitos SELV, y los puertos de redes de área extendida (wide area network = WAN) contienen circuitos TNV. En algunos casos, tanto los puertos LAN como los WAN usan conectores RJ-45. Proceda con precaución al conectar los cables.

Warning! För att undvika elektriska stötar, koppla inte säkerhetskretsar med extra låg spänning (SELV-kretsar) till kretsar med telefonnätspänning (TNV-kretsar). LAN-portar innehåller SELV-kretsar och WAN-portar innehåller TNV-kretsar. Vissa LAN- och WAN-portar är försedda med RJ-45-kontakter. Iakttta försiktighet vid anslutning av kablar.

Card Handling Warning



Warning High performance devices on this card can get hot during operation. To remove the card, hold it by the faceplate and bottom edge. Allow the card to cool before touching any other part of it or before placing it in an antistatic bag.

Waarschuwing Geavanceerde onderdelen op deze kaart kunnen tijdens het gebruik heet worden. Als u de kaart wilt verwijderen, moet u deze vastpakken bij de voorkant en onderrand. Laat de kaart afkoelen voordat u andere delen van de kaart aanraakt of voordat u de kaart in een antistatische verpakking plaatst.

Varoitus Tämän kortin suorituskykyiset mekanismit voivat kuumeta käytössä. Kortin voi poistaa tarttumalla siihen tasopinnasta ja alareunasta. Anna kortin jäähtyä, ennen kuin kosket sen muihin osiin tai ennen kuin laitat sen antistaattiseen pussiin.

Attention Les périphériques hautes performances de cette carte emmagasinent de la chaleur en cours de fonctionnement. Pour retirer la carte, tenez-la par le cache et par la partie inférieure. Attendez qu'elle refroidisse avant de toucher les autres parties ou avant de la mettre dans un sac antistatique.

Warnung Hochleistungsgeräte auf dieser Karte können während des Betriebs sehr heiß werden. Um die Karte zu entfernen, halten Sie sie an der Frontplatte und der Unterkante. Lassen Sie die Karte abkühlen, bevor Sie sie an einer anderen Stelle berühren oder in einen Antistatikbehälter stecken.

Avvertenza Le apparecchiature ad alte prestazioni montati su questa scheda possono surriscaldarsi durante il funzionamento. Per rimuovere la scheda, tenerla tra la piastra anteriore e il bordo inferiore. Attendere che la scheda si raffreddi prima di toccare le altre componenti o di porla in un sacchetto antistatico.

Advarsel Enkelte høykapasitets komponenter på dette kortet kan bli varme under bruk. Hvis du skal ta ut kortet, må du holde i kortet ved frontplaten og den nederste kanten. La kortet bli avkjølt før du tar på andre deler av kortet eller putter det i en antistatisk pose.

Aviso Os dispositivos de alta performance nesta placa podem aquecer durante o funcionamento. Para retirar a placa, segure-a pela borda do prato e da base. Deixe a placa arrefecer antes de tocar em qualquer outra zona da mesma ou antes de a colocar num saco antiestático.

¡Advertencia! Los dispositivos de alto rendimiento contenidos en la tarjeta pueden alcanzar elevadas temperaturas durante su funcionamiento. Para extraer la tarjeta, sujétela por el extremo inferior y la cubierta. Permita que se enfríe la tarjeta antes de tocar ninguna pieza de la misma y de colocarla en una bolsa antiestática.

Varning! Detta korts högprestandaenheter kan bli mycket varma under drift. Ta ut kortet genom att hålla det på frontpanelen och nedre kanten. Låt kortet svalna innan du vidrör någon annan del av det eller innan du placerar det i en antistatisk påse.

FCC Registration and Requirements

The following paragraphs describe requirements and information based on FCC rules.

FCC Rules, Part 15

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 his own expense.

Modifications to this product not authorized by Cisco Systems, Inc., could void the FCC approval and negate your authority to operate the product.

FCC Class A Compliance

The equipment described in this manual generates and may radiate radio-frequency energy. If it is not installed in accordance with Cisco's installation instructions, it may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class A digital device in accordance with the specifications in part 15 of the FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

You can determine whether your equipment is causing interference by turning it off. If the interference stops, it was probably caused by the Cisco equipment or one of its peripheral devices. If the equipment causes interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the equipment to one side or the other of the television or radio.
- Move the equipment farther away from the television or radio.
- Plug the equipment into an outlet that is on a different circuit from the television or radio. (That is, make certain the equipment and the television or radio are on circuits controlled by different circuit breakers or fuses.)

FCC Rules, Part 68

1 FCC Part 68 Registration

The Cisco AS5800 Universal Access Server complies with FCC Rules, Part 68. On the cover of this equipment is a label that contains, among other information, the FCC Part 68 registration number.

2 REN

The ringer equivalence number (REN) is used to determine the quality of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. The REN is not applicable to digital interfaces.

3 Service

In the event of equipment malfunction, all repairs should be performed by Cisco Systems or an authorized agent. It is the responsibility of users requiring service to report the need for service to Cisco Systems or to one of our authorized agents. Service can be facilitated through our office at:

Cisco Systems, Inc.
 170 West Tasman Drive
 San Jose, CA 95134-4567
 Telephone: (800) 553-2447

The telephone company can ask you to disconnect the equipment from the network until the problem is corrected or until you are sure that the equipment is not malfunctioning.

4 Facility Interface Information

In order to connect registered terminal equipment to the telephone company lines, the terminal equipment must utilize FCC registered jacks. Standardized jacks are used for this equipment. The following table contains Digital Interface Code (FIC), Service Order Code (SOC), and network information for the equipment.

Manufacturer Port Identifier	Digital Interface Code (FIC)	Service Order Code (SOC)	Network Jack
DS58-12T1	04DU9-BN	6.0Y	RJ48C
DS58-12T1	04DU9-DN	6.0Y	RJ48C
DS58-12T1	04DU9-1KN	6.0Y	RJ48C
DS58-12T1	04DU9-1SN	6.0Y	RJ48C

5 Disruption of the Network

If the Cisco AS5800 universal access server disrupts the telephone network, the telephone company can discontinue your service temporarily. If possible, the telephone company will notify you in advance. If advance notice is not practical, they will notify you as soon as possible. You are also informed of your right to file a complaint with the FCC.

6 Telephone Company Facility Changes

The telephone company can make changes in its facilities, equipment, operations, or procedures that can affect the operation of your equipment. If they do, you should be notified in advance so you have an opportunity to maintain uninterrupted telephone service.

7 Electrical Safety Advisory

While the Cisco AS5800 universal access server is fully compliant with FCC rules and regulations, it is recommended that an alternating current (AC) surge arrestor of the form and capability suitable for the model purchased be installed in the AC outlet to which the access server is connected. Consult with your distributor as to the surge protector requirements for your equipment.

Industry Canada Compliance

This class A digital apparatus meets all requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada

The following are notices required by Industry Canada Terminal Attachment Program Certification Procedure CP-01, Part I, Section 14.

Ringer Equivalence Number

The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of Ringer Equivalence Numbers of all the devices does not exceed 5.

Equipment Attachment Limitations

The Industry Canada 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 the 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 conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian 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 electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.



Caution Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

CISPR 22 Requirements

Specifications covered:

- EN55022:1994 - EU requirements
- AS/NZS 3548:1995 - Australia

VCCI (Japan)

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取扱説明書に従って正しい取り扱いをして下さい。

This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

Obtaining Documentation

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly. Therefore, it is probably more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

Ordering Documentation

Registered CCO users can order the Documentation CD-ROM and other Cisco Product documentation through our online Subscription Services at <http://www.cisco.com/cgi-bin/subcat/kaojump.cgi>.

Nonregistered CCO users can order documentation through a local account representative by calling Cisco's corporate headquarters (California, USA) at 408 526-4000 or, in North America, call 800 553-NETS (6387).

Obtaining Technical Assistance

Cisco provides Cisco Connection Online (CCO) as a starting point for all technical assistance. Warranty or maintenance contract customers can use the Technical Assistance Center. All customers can submit technical feedback on Cisco documentation using the web, e-mail, a self-addressed stamped response card included in many printed docs, or by sending mail to Cisco.

Cisco Connection Online

Cisco continues to revolutionize how business is done on the Internet. Cisco Connection Online is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

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Customers and partners can self-register on CCO to obtain additional personalized information and services. Registered users may order products, check on the status of an order and view benefits specific to their relationships with Cisco.

You can access CCO in the following ways:

- WWW: www.cisco.com

- Telnet: cco.cisco.com
- Modem **using standard connection rates** and the following terminal settings:
 - VT100 emulation; 8 data bits; no parity; and 1 stop bit.
 - From North America, call 408 526-8070
 - From Europe, call 33 1 64 46 40 82

You can e-mail questions about using CCO to cco-team@cisco.com.

Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to warranty or maintenance contract customers who need technical assistance with a Cisco product that is under warranty or covered by a maintenance contract.

To display the TAC web site that includes links to technical support information and software upgrades and for requesting TAC support, use www.cisco.com/techsupport.

To contact by e-mail, use one of the following:

Language	E-mail Address
English	tac@cisco.com
Hanzi (Chinese)	chinese-tac@cisco.com
Kanji (Japanese)	japan-tac@cisco.com
Hangul (Korean)	korea-tac@cisco.com
Spanish	tac@cisco.com
Thai	thai-tac@cisco.com

In North America, TAC can be reached at 800 553-2447 or 408 526-7209. For other telephone numbers and TAC e-mail addresses worldwide, consult the following web site:
<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>.

Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, for your convenience many documents contain a response card behind the front cover. Otherwise, you can mail your comments to the following address:

Cisco Systems, Inc.
Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

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