

## Stratix 5900 Services Router

### Catalog Number 1783-SR

The Stratix® 5900 services router supports Ethernet communication from component to component and has a chassis for use in industrial automation and harsh environments.



#### ATTENTION:

Read this document and the documents listed in the Additional Resources section about installation, configuration and operation of this equipment before you install, configure, operate or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

#### 注意:

在安装、配置、操作和维护本产品前，请阅读本文档以及“其他资源”部分列出的有关设备安装、配置和操作的相应文档。除了所有适用规范、法律和标准的相关要求之外，用户还必须熟悉安装和接线说明。

安装、调整、投运、使用、组装、拆卸和维护等各项操作必须由经过适当训练的专业人员按照适用的操作规范实施。

如果未按照制造商指定的方式使用该设备，则可能会损害设备提供的保护。

#### ATENCIÓN:

Antes de instalar, configurar, poner en funcionamiento o realizar el mantenimiento de este producto, lea este documento y los documentos listados en la sección Recursos adicionales acerca de la instalación, configuración y operación de este equipo. Los usuarios deben familiarizarse con las instrucciones de instalación y cableado y con los requisitos de todos los códigos, leyes y estándares vigentes.

El personal debidamente capacitado debe realizar las actividades relacionadas a la instalación, ajustes, puesta en servicio, uso, ensamblaje y mantenimiento de conformidad con el código de práctica aplicable.

Si este equipo se usa de una manera no especificada por el fabricante, la protección provista por el equipo puede resultar afectada.

#### ATENÇÃO:

Leia este e os demais documentos sobre instalação, configuração e operação do equipamento que estão na seção Recursos adicionais antes de instalar, configurar, operar ou manter este produto. Os usuários devem se familiarizar com as instruções de instalação e fiação além das especificações para todos os códigos, leis e normas aplicáveis.

É necessário que as atividades, incluindo instalação, ajustes, colocação em serviço, utilização, montagem, desmontagem e manutenção sejam realizadas por pessoal qualificado e especializado, de acordo com o código de prática aplicável.

Caso este equipamento seja utilizado de maneira não estabelecida pelo fabricante, a proteção fornecida pelo equipamento pode ficar prejudicada.

#### ВНИМАНИЕ:

Перед тем как устанавливать, настраивать, эксплуатировать или обслуживать данное оборудование, прочитайте этот документ и документы, перечисленные в разделе «Дополнительные ресурсы». В этих документах изложены сведения об установке, настройке и эксплуатации данного оборудования. Пользователи обязаны ознакомиться с инструкциями по установке и прокладке соединений, а также с требованиями всех применимых норм, законов и стандартов.

Все действия, включая установку, наладку, ввод в эксплуатацию, использование, сборку, разборку и техническое обслуживание, должны выполняться обученным персоналом в соответствии с применимыми нормами и правилами.

Если оборудование используется не предусмотренным производителем образом, защита оборудования может быть нарушена.

#### 注意:

本製品を設置、構成、稼働または保守する前に、本書および本機器の設置、設定、操作についての参考資料の該当箇所に記載されている文書に目を通してください。ユーザは、すべての該当する条例、法律、規格の要件に加えて、設置および配線の手順に習熟している必要があります。

設置調整、運転の開始、使用、組立て、解体、保守を含む諸作業は、該当する実施規則に従って訓練を受けた適切な作業員が実行する必要があります。

本機器が製造メーカーにより指定されていない方法で使用されている場合、機器により提供されている保護が損なわれる恐れがあります。

#### ACHTUNG:

Lesen Sie dieses Dokument und die im Abschnitt „Literaturverweise“ genannten Dokumente zur Installation, Konfiguration und Bedienung dieser Ausrüstung sorgfältig durch, bevor Sie dieses Produkt installieren, konfigurieren, bedienen oder instandsetzen. Benutzer müssen sich mit den Anweisungen zur Installation und Verdrahtung vertraut machen und müssen die Anforderungen aller geltenden Vorschriften, Gesetze und Normen kennen.

Aktivitäten wie Installation, Einstellung, Inbetriebnahme, Verwendung, Montage, Demontage und Instandsetzung müssen durch ausreichend geschultes Personal in Übereinstimmung mit den geltenden Durchführungsvorschriften ausgeführt werden.

Wenn diese Ausrüstung in einer Weise verwendet wird, die nicht vom Hersteller angegeben wurde, kann der von der Ausrüstung bereitgestellte Schutz beeinträchtigt sein.

#### ATTENTION :

Lisez ce document et les documents listés dans la section Ressources complémentaires relatifs à l'installation, la configuration et le fonctionnement de cet équipement avant d'installer, configurer, utiliser ou entretenir ce produit. Les utilisateurs doivent se familiariser avec les instructions d'installation et de câblage en plus des exigences relatives aux codes, lois et normes en vigueur.

Les activités relatives à l'installation, le réglage, la mise en service, l'utilisation, l'assemblage, le démontage et l'entretien doivent être réalisées par des personnes formées selon le code de pratique en vigueur.

Si cet équipement est utilisé d'une façon qui n'a pas été définie par le fabricant, la protection fournie par l'équipement peut être compromise.

#### 주의:

본 제품 설치, 설정, 작동 또는 유지 보수하기 전에 본 문서를 포함하여 설치, 설정 및 작동에 관한 참고 자료 섹션의 문서들을 반드시 읽고 숙지하십시오. 사용자는 모든 관련 규정, 법규 및 표준에서 요구하는 사항에 대해 반드시 설치 및 배선 지침을 숙지해야 합니다.

설치, 조정, 가동, 사용, 조립, 분해, 유지보수 등 모든 작업은 관련 규정에 따라 적절한 교육을 받은 사용자를 통해서만 수행해야 합니다.

본 장비를 제조사가 명시하지 않은 방법으로 사용하면 장비의 보호 기능이 손상될 수 있습니다.

#### ATTENZIONE

Prima di installare, configurare ed utilizzare il prodotto, o effettuare interventi di manutenzione su di esso, leggere il presente documento ed i documenti elencati nella sezione "Altre risorse", riguardanti l'installazione, la configurazione ed il funzionamento dell'apparecchiatura. Gli utenti devono leggere e comprendere le istruzioni di installazione e cablaggio, oltre ai requisiti previsti dalle leggi, codici e standard applicabili.

Le attività come installazione, regolazioni, utilizzo, assemblaggio, disassemblaggio e manutenzione devono essere svolte da personale adeguatamente addestrato, nel rispetto delle procedure previste.

Qualora l'apparecchio venga utilizzato con modalità diverse da quanto previsto dal produttore, la sua funzione di protezione potrebbe venire compromessa.



**DIKKAT:**

Bu ürünün kurulumu, yapılandırılması, işletilmesi veya bakımı öncesinde bu dokümanı ve bu ekipmanın kurulumu, yapılandırılması ve işletimi ile ilgili İlave Kaynaklar bölümünde yer listelenmiş dokümanları okuyun. Kullanıcılar yürürlükteki tüm yönetmelikler, yasalar ve standartların gereksinimlerine ek olarak kurulum ve kablolama talimatlarını da öğrenmek zorundadır.

Kurulum, ayarlama, hizmete alma, kullanma, parçaları birleştirme, parçaları sökme ve bakım gibi aktiviteler sadece uygun eğitimleri almış kişiler tarafından yürürlükteki uygulama yönetmeliklerine uygun şekilde yapılabilir.

Bu ekipman üretici tarafından belirlenmiş amacın dışında kullanılırsa, ekipman tarafından sağlanan koruma bozulabilir.

**注意事項:**

在安裝、設定、操作或維護本產品前，請先閱讀此文件以及列於「其他資源」章節中有關安裝、設定與操作此設備的文件。使用者必須熟悉安裝和配線指示，並符合所有法規、法律和標準要求。

包括安裝、調整、交付使用、使用、組裝、拆卸和維護等動作都必須交由已經過適當訓練的人員進行，以符合適用的實作法規。

如果將設備用於非製造商指定的用途時，可能會造成設備所提供的保護功能受損。

**POZOR:**

Než začnete instalovat, konfigurovat či provozovat tento výrobek nebo provádět jeho údržbu, přečtěte si tento dokument a dokumenty uvedené v části Dodatečné zdroje ohledně instalace, konfigurace a provozu tohoto zařízení. Uživatelé se musejí vedle požadavků všech relevantních vyhlášek, zákonů a norem nutně seznámit také s pokyny pro instalaci a elektrické zapojení.

Činnosti zahrnující instalaci, nastavení, uvedení do provozu, užívání, montáž, demontáž a údržbu musí vykonávat vhodně proškolený personál v souladu s příslušnými prováděcími předpisy.

Pokud se toto zařízení používá způsobem neodpovídajícím specifikaci výrobce, může být narušena ochrana, kterou toto zařízení poskytuje.

**UWAGA:**

Przed instalacją, konfiguracją, użytkowaniem lub konserwacją tego produktu należy przeczytać niniejszy dokument oraz wszystkie dokumenty wymienione w sekcji Dodatkowe źródła omawiające instalację, konfigurację i procedury użytkowania tego urządzenia. Użytkownicy mają obowiązek zapoznać się z instrukcjami dotyczącymi instalacji oraz oprzewodowania, jak również z obowiązującymi kodeksami, prawem i normami.

Działania obejmujące instalację, regulację, przekazanie do użytkowania, użytkowanie, montaż, demontaż oraz konserwację muszą być wykonywane przez odpowiednio przeszkolony personel zgodnie z obowiązującym kodeksem postępowania.

Jeśli urządzenie jest użytkowane w sposób inny niż określony przez producenta, zabezpieczenie zapewniane przez urządzenie może zostać ograniczone.

**OBS!**

Läs detta dokument samt dokumentet, som står listat i avsnittet Övriga resurser, om installation, konfigurering och drift av denna utrustning innan du installerar, konfigurerar eller börjar använda eller utföra underhållsarbete på produkten. Användare måste bekanta sig med instruktioner för installation och kabeldragning, förutom krav enligt gällande koder, lagar och standarder.

Åtgärder som installation, justering, service, användning, montering, demontering och underhållsarbete måste utföras av personal med lämplig utbildning enligt lämpligt bruk.

Om denna utrustning används på ett sätt som inte anges av tillverkaren kan det hända att utrustningens skyddsanordningar försätts ur funktion.

**LET OP:**

Lees dit document en de documenten die genoemd worden in de paragraaf Aanvullende informatie over de installatie, configuratie en bediening van deze apparatuur voordat u dit product installeert, configureert, bedient of onderhoudt. Gebruikers moeten zich vertrouwd maken met de installatie en de bedringsinstructies, naast de vereisten van alle toepasselijke regels, wetten en normen.

Activiteiten zoals het installeren, afstellen, in gebruik stellen, gebruiken, monteren, demonteren en het uitvoeren van onderhoud mogen uitsluitend worden uitgevoerd door hiervoor opgeleid personeel en in overeenstemming met de geldende praktijkregels.

Indien de apparatuur wordt gebruikt op een wijze die niet is gespecificeerd door de fabrikant, dan bestaat het gevaar dat de beveiliging van de apparatuur niet goed werkt.

产品中有毒有害物质或元素的名称及含量

| 部件名称           | 有毒有害物质或元素 |   |   |     |      |       |
|----------------|-----------|---|---|-----|------|-------|
|                | 铅         | 汞 | 镉 | 六价铬 | 多溴联苯 | 多溴二苯醚 |
| 金属部件 (包括紧固件)   | X         | 0 | 0 | 0   | 0    | 0     |
| 印刷电路板组件和元件     | X         | 0 | 0 | 0   | 0    | 0     |
| 电缆和电缆组件        | X         | 0 | 0 | 0   | 0    | 0     |
| 塑料和聚合物部件       | 0         | 0 | 0 | 0   | 0    | 0     |
| 显示器, 包含灯泡      | X         | X | 0 | 0   | 0    | 0     |
| 除印刷电路板外的其他电子组件 | X         | 0 | 0 | 0   | 0    | 0     |
| 光学玻璃材料         | X         | 0 | X | 0   | 0    | 0     |
| 干电池            | 0         | 0 | 0 | 0   | 0    | 0     |

O: 代表此种部件的所有均质材料中所含的该种有毒有害物质均低于中华人民共和国信息产业部所颁布的《电子信息产品中有毒有害物质的限量要求》(SJ/T 11363-2006) 规定的限量。

X: 代表此种部件所用的均质材料中, 至少有一类材料其所含的有毒有害物质高于中华人民共和国信息产业部所颁布的《电子信息产品中有毒有害物质的限量要求》(SJ/T 11363-2006) 规定的限量。

以销售日期为准, 此表显示在“思科系统公司”的电子信息产品部件中何处存在这些有毒有害物质。请注意, 并非上列所有部件都有包含在内装产品中。

除非产品上另有标记, 所有内附产品及其部件的“环保使用期限”均由此显示的符号表示。此环保使用期限只适用于产品手册中所规定的使用条件。

Table of Toxic or Hazardous Substances and Elements Names and Contents

| Part Name                                 | (Toxic or Hazardous Substances and Elements) |      |      |                     |       |        |
|---|--|------|------|---------------------|-------|--------|
|   | (Pb)   | (Hg) | (Cd) | (Cr <sup>6+</sup> ) | (PBB) | (PBDE) |
| Metal Parts (including fasteners)         | X  | 0    | 0    | 0                   | 0     | 0      |
| Printed circuit assemblies and components | X  | 0    | 0    | 0                   | 0     | 0      |
| Cables & Cable Assemblies                 | X  | 0    | 0    | 0                   | 0     | 0      |
| Plastic and Polymeric parts               | 0  | 0    | 0    | 0                   | 0     | 0      |
| Displays including lamps                  | X  | X    | 0    | 0                   | 0     | 0      |
| Other electronic assembly beside PCB      | X  | 0    | 0    | 0                   | 0     | 0      |
| Optical glass materials                   | X  | 0    | X    | 0                   | 0     | 0      |
| Batteries                                 | 0  | 0    | 0    | 0                   | 0     | 0      |

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in the Ministry of Information Industry of the People's Republic of China standard "Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products" (SJ/T 11363-2006).

X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in the Ministry of Information Industry of the People's Republic of China standard "Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products" (SJ/T 11363-2006).

This table shows where these substances may be found in the parts of "Cisco Systems, Inc." electronic information products, as of the date of sale of the enclosed product. Note not all of the parts listed above may be included in the enclosed product.

The Environmental Protection Use Period (EPUP) for all enclosed products and their parts is per the symbol show here, unless otherwise marked on the product. The Environmental Protection Use Period applies only under use conditions defined in the product manual

**ATTENTION:**

- Before installing, configuring, operating, or maintaining this product, read this document and the documents listed in the Additional Resources section for installing, configuring, or operating equipment. Users should familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.
- Installation, adjustments, putting into service, use, assembly, disassembly, and maintenance shall be carried out by suitably trained personnel in accordance with applicable code of practice. In case of malfunction or damage, no attempts at repair should be made. The product should be returned to the manufacturer for repair. Do not dismantle the module.
- If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- This equipment is certified for use only within the surrounding air temperature range of -25...60 °C (-13...140 °F). The equipment must not be used outside of this range.
- Solid state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation, and Maintenance of Solid State Controls, publication SGI-1.1, available from your local Rockwell Automation sales office or online at <http://www.rockwellautomation.com/literature>, describes some important differences between solid state equipment and hard-wired electromechanical devices.



**ATTENTION:** When installing the product, use the provided or designated connection cables/power cables/AC adaptors. Using any other cables/adaptors could cause a malfunction or a fire. Electrical Appliance and Material Safety Law prohibits the use of UL-certified cables (that have the 'UL' shown on the code) for any other electrical devices than products designated by CISCO. The use of cables that are certified by Electrical Appliance and Material Safety Law (that have 'PSE' shown on the code) is not limited to CISCO-designated products.



**ATTENTION:** Read the DIN-rail mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation to people and damage to the system.

- The covers are an integral part of the safety design of the product. Do not operate the unit without the covers installed.
- No user-serviceable parts inside. Do not open.
- Hot surface.



**ATTENTION:** 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 RJ45 connectors. Use caution when connecting cables.



**ATTENTION:** Installation of the equipment must comply with local and national electrical codes.

- Read the installation instructions before connecting the system to the power source.
- 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 RJ45 connectors. Use caution when connecting cables.
- This equipment must be grounded. 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.
- When installing or replacing the unit, the ground connection must always be made first and disconnected last.
- Do not use this product near water; for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

**IMPORTANT** At the end of its life, this equipment should be collected separately from any unsorted municipal waste.

**IMPORTANT** This product is not intended to be directly connected to the Cable Distribution System. Additional regulatory compliance and legal requirements may apply for direct connection to the Cable Distribution System. This product may connect to the Cable Distribution System **only** through a device that is approved for direct connection.

**Prevent Electrostatic Discharge**

**ATTENTION:** This equipment is sensitive to electrostatic discharge, which can cause internal damage and affect normal operation. Follow these guidelines when you handle this equipment:

- Touch a grounded object to discharge potential static.
- Wear an approved grounding wrist strap.
- Do not touch connectors or pins on component boards.
- Do not touch circuit components inside the equipment.
- Use a static-safe workstation, if available.
- Store the equipment in appropriate static-safe packaging when not in use.

**IMPORTANT** When the router is installed in an industrial enclosure, the temperature within the enclosure is greater than normal room temperature outside the enclosure.

The temperature inside the enclosure must not exceed 60 °C (140 °F), the maximum ambient enclosure temperature of the router.

**IMPORTANT** Any illustrations, charts, sample programs, and layout examples shown in this publication are intended solely for the purposes of example. Since there are many variables and requirements associated with any particular installation, Rockwell Automation does not assume responsibility or liability for actual use based upon the examples shown in this publication.

**Items Shipped with the Stratix 5900 Services Router**

The following items are included with the services router.

- AC power supply
- AC power supply cable
- Power cord retention lock
- Power switch lock
- RJ45-to-DB-9 console cable
- Straight-through RJ45 Ethernet cable
- DIN-rail mounting-bracket kit

**Install the Unit**

The following items are needed to install the unit.

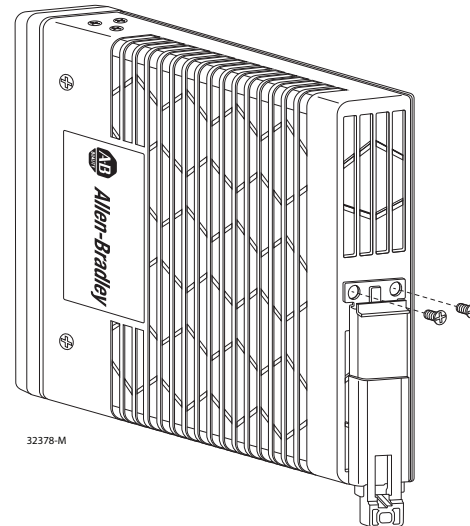
- ESD-preventive cord and wrist strap
- DIN rail bracket
- Ethernet cables for connecting to the Fast Ethernet (FE) WAN and LAN ports

The Stratix 5900 Services Router can be installed on a flat surface or mounted DIN rail.

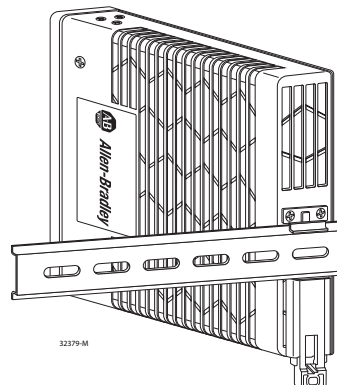
**Install the Services Router on a DIN Rail**

**ATTENTION:** The Stratix 5900 Services Router cannot be shipped with a DIN rail installed. Install the DIN rail onto the router at the final enclosure destination.

1. Remove the two screws on the back of the unit.



2. Line the bracket holes up and attach the bracket.
3. Attach to the DIN rail.



### Installation Clearance

The recommended clearance when horizontally mounted is 1.5 inches on both sides for floor-mount bracket clearance and 2 inches on top.

**IMPORTANT** Top clearance is not required but stacking heat dissipating objects on top of the services router is not allowed.

I/O side clearance is needed as it is required to access the cable connections. Clearance is not required on the backside (opposite side from I/O face) unless DIN rail mounting is required. Clearance is required to attach and mount the DIN rail bracket. The same clearances apply when mounted vertically.

### Prevent Damage to the Router

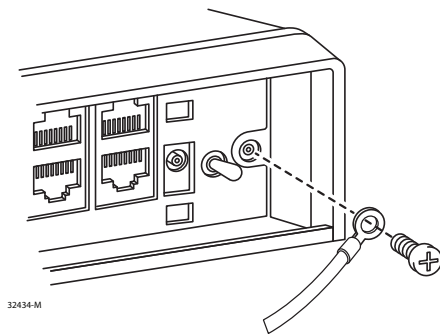
To prevent damage to your router, follow these guidelines when connecting devices to your router.

**ATTENTION:** Turn off power to the devices and to the router until all connections are completed. Do not turn on the devices until after you have completed all connections to the router.

If you must supply your own cable, see the Stratix 5900 Services Router User Manual, publication [1783-UM005](#), for cabling specifications.

### Ground the Router

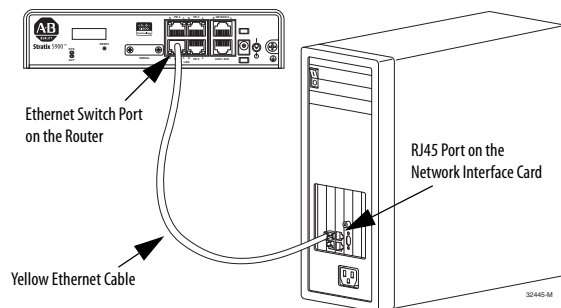
Follow this illustration to ground the router.



### Connect a Personal Computer, Server, or Workstation

To connect a computer (or other Ethernet devices) to an Ethernet switch port, follow these steps.

1. Connect one end of the yellow Ethernet cable to an Ethernet switch port on the router.



2. Connect the other end of the cable to the RJ45 port on the network interface card (NIC) that is installed in the personal computer, server, or workstation.
3. (Optional) Connect additional servers, personal computers, or workstations to the other Ethernet switch ports.

For more connection options, see the Stratix 5900 Services Router User Manual, publication [1783-UM005](#).

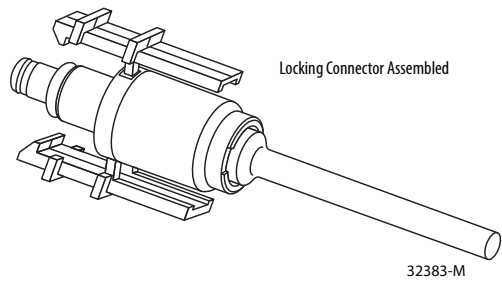
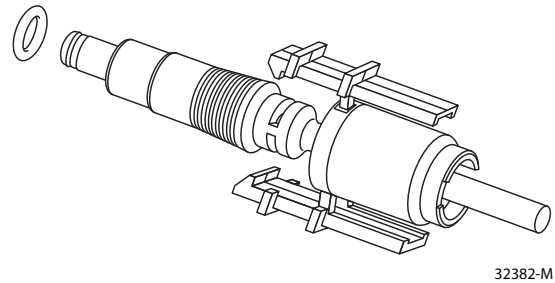
### Apply Power

**IMPORTANT** This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 120V AC, 20A U.S. (240V AC, 16 to 20A international). This product requires short-circuit (overcurrent) protection, to be provided as part of the building installation. Install only in accordance with national and local wiring regulations.

**IMPORTANT** The device is designed to work with TN power systems.

The router comes with a retention lock plug and the power supply. Follow these instructions to apply power.

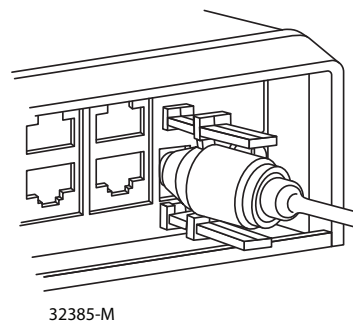
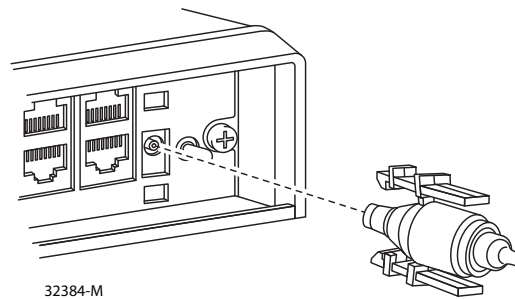
1. Attach the locking connector to the power cord.



2. Plug the adapter (with the power cord attached) into the router.
3. Plug the power cord into the outlet.

**ATTENTION:** This product is to be connected to a Listed or certified class 2 output/IEC 60950-1 compliant limited power source, rated 5V DC, 4 A max.

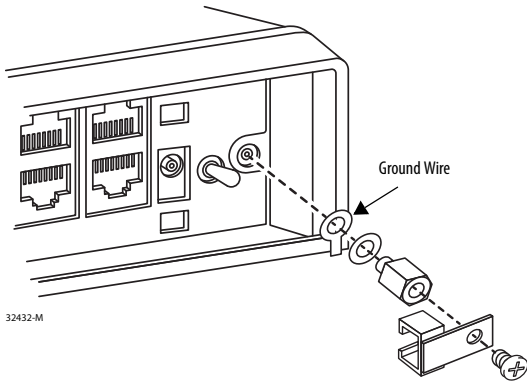
4. Push the adapter in to connect the lock clips.



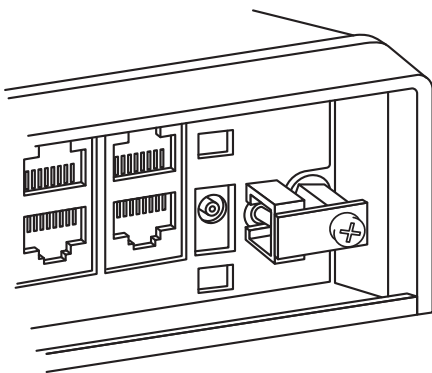
Power is connected to the services router.

### Lock

Follow this illustration to assemble the lock.



### Connected On/Off Power Lock



### Verify Connections

Follow these instructions to verify that all devices are properly connected to the router.

1. Turn on all the connected devices.
2. Check the status indicators.
3. Use this table to verify the router operation. For complete status indicator descriptions, see the Stratix 5900 Services Router User Manual, publication [1783-UM005](#).

| Power and Link | Status Indicator | Normal Patterns  |
|----------------|------------------|--|
| SYS            | Yellow           | FPGA download is complete.   |
|                | Green (blinking) | ROMMON is operational.   |
|                | Off              | After powering up, when FPGA is being downloaded (in ROMMON).  |
| ACT            | Green            | Network activity on FE Switch ports, GE WAN port, and serial interfaces.                                 |
|                | Off              | No network activity.   |
|                | EN               | Green when the interface is up.  |
| S              | S                | Blinking green indicates port speed. Slow blinking for 100Base SFPs and fast blinking for 1000Base SFPs. |

### Configure the Services Router

For instructions on how to configure the services router, see the Stratix 5900 Services Router User Manual, publication [1783-UM005](#).

## Specifications

This table lists the product specifications for the Stratix 5900 Services Router. For more information, see the Stratix 5900 Services Router User Manual, publication [1783-UM005](#).

| Parameter                                    | Description   |
|--|---|
| Dimensions (H x W x D)                       | 44 x 196 x 206 mm (1.73 x 7.7 x 8.1 in.)  |
| Weight                                       | 1.5 kg (3.2 lb)   |
| Maximum Power Consumption                    | 11 W  |
| Operating Temperature and Altitude           | -25...60 °C (-13...140 °F)  |
|  | Derate max operating temperature 1.5 °C per 1000 feet above 5000 ft   |
|  | 10,000 ft maximum   |
| Ingress Protection Rating                    | IP41 per IEC 60529 for Vertical Falling Water, Pollution Degree 3   |
| Humidity                                     | 5...95%, noncondensing  |
| Pollution                                    | Pollution 3 for dust  |
| Standard Safety Certifications               | UL 60950-1, 2nd edition; CAN/CSA C22.2 No. 60950-1, 2nd edition, EN 60950-1, 2nd edition; CB to IEC 60950-1, 2nd edition with all group differences and national deviations |
| EMC Emissions                                | EN55022/CISPR22, CFR 47 Part 15, ICES003, VCCI-V-3, AS/NZS CISPR22, CNS13438, CISPR22, CNS13438, EN300-386, EN61000-3-2, EN61000-3-3, and EN61000-6-1                       |
| EMC Immunity                                 | EN55024/CISPR24, (EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-11), and EN300-386   |
| Radio Immunity                               | EN301 489-1, EN 301 489-7, and EN301 489-24   |
| <b>Transportation/Storage Temperature</b>    |   |
| Temperature                                  | -40...85 °C (-40...185 °F)  |
| Humidity, Non                                | 5...95%, noncondensing  |
| Altitude                                     | 4570 m (15,000 ft)  |
| <b>Router AC Power Adapter<sup>(1)</sup></b> |   |
| Input Voltage                                | 85...264V AC  |
|  | 100...240V AC nominal   |
| Maximum Power Consumption                    | 25 W  |
| Maximum Output Power Rating                  | 20 W<br>(5V DC, 4 A)  |

(1) AC power adapter is not IP41 rated. Installation must include protection of the adapter and power plug from water.

## Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

| Resource  | Description   |
|---|---|
| Stratix 5900 Services Router User Manual, publication <a href="#">1783-UM005</a>  | Describes the installation and configuration of the Stratix 5900 Services Router.   |
| EtherNet/IP Secure Communication User Manual, publication <a href="#">ENET-UM003</a>  | Provides description and configuration of the 1756-EN2TSC module, security-enhanced version of the 1756-EN2T.   |
| EtherNet/IP Network Configuration User Manual, publication <a href="#">ENET-UM001</a>   | Describes how you can use EtherNet/IP communication modules with your Logix5000 controller and communicate with various devices on the Ethernet network.            |
| Cisco Manuals for Cisco 819 Integrated Services Router  | <a href="http://www.Cisco.com">http://www.Cisco.com</a>   |
| Cisco Configuration Professional User Guide   | <a href="http://www.cisco.com/en/US/prod/collateral/routers/ps9422/preso_ccp_ov.pdf">http://www.cisco.com/en/US/prod/collateral/routers/ps9422/preso_ccp_ov.pdf</a> |
| Industrial Automation Wiring and Grounding Guidelines, publication <a href="#">1770-4.1</a>   | Provides general guidelines for installing a Rockwell Automation industrial system.   |
| Product Certifications website, <a href="http://www.rockwellautomation.com/products/certification">http://www.rockwellautomation.com/products/certification</a> | Provides declarations of conformity, certificates, and other certification details.   |

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

**Notes:**

## Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At <http://www.rockwellautomation.com/support/>, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://www.rockwellautomation.com/support/>.

### Installation Assistance

If you experience a problem within the first 24 hours of installation, review the information that is contained in the installation instructions. You can contact Customer Support for initial help in getting your product up and running.

|                                 |  |
|---------------------------------|--|
| United States or Canada         | 1.440.646.3434   |
| Outside United States or Canada | Use the <a href="#">Worldwide Locator</a> at <a href="http://www.rockwellautomation.com/support/americas/phone_en.html">http://www.rockwellautomation.com/support/americas/phone_en.html</a> , or contact your local Rockwell Automation representative. |

### New Product Satisfaction Return

Rockwell Automation tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

|                       |   |
|-----------------------|---|
| United States         | Contact your distributor. You must provide a Customer Support case number (call the phone number above to obtain one) to your distributor to complete the return process. |
| Outside United States | Please contact your local Rockwell Automation representative for the return procedure.  |

### Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete this form, publication [RA-DU002](#), available at <http://www.rockwellautomation.com/literature/>.

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