

Installation Instructions

Original Instructions



Allen-Bradley

by ROCKWELL AUTOMATION

Stratix 2000 Series A Ethernet Unmanaged Switches

Catalog Numbers 1783-US5T, 1783-US8T, 1783-US4T1F, 1783-US4T1H, 1783-US5TG, 1783-US6T2F, 1783-US6T2H, 1783-US6TG2CG, 1783-US7T1F, 1783-US7T1H, 1783-US14T2S, 1783-US16T, 1783-US16TA

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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、投用、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, desensamblaje 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を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 „Weitere Informationen“ aufgeführten Dokumente, die Informationen zu Installation, Konfiguration und Bedienung dieses Produkts enthalten, bevor Sie dieses Produkt installieren, konfigurieren, bedienen oder warten. Anwender müssen sich neben den Bestimmungen aller anwendbaren Vorschriften, Gesetze und Normen zusätzlich mit den Installations- und Verdrahtungsanweisungen vertraut machen.

Arbeiten im Rahmen der Installation, Anpassung, Inbetriebnahme, Verwendung, Montage, Demontage oder Instandhaltung dürfen nur durch ausreichend geschulte Mitarbeiter und in Übereinstimmung mit den anwendbaren Ausführungsvorschriften vorgenommen werden.

Wenn das Gerät in einer Weise verwendet wird, die vom Hersteller nicht vorgesehen ist, kann die Schutzfunktion 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 사용자가 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.

DİKKAT: Bu ürünün kurulumu, yapılandırılması, işletilmesi veya bakımı öncesinde bu dokümanı ve bu ekipmanın kurulumu, yapılandırılması ve işletimi ile ilgili ilave Kaynaklar bölümünde yer listelenmiş dokümanları okuyun. Kullanıcılar yürürlükteki tüm yönetmelikler, yasalar ve standartların gereksinimlerine ek olarak kurulum ve kablolarla 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：在安装、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 specifikacím 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 omawiają ce instalację, konfigurację i procedury użytkowania tego urządzenia. Użytkownicy mają obowiązek zapoznać się z instrukcjami dotyczącymi instalacji oraz oprzewodowania, jak również z obowiązkami cymy kodeksami, prawem i normami.

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

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

OBES: 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 bedradinginstructies, 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 opgeleide 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.

Environment and Enclosure

**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 module 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 0...60 °C (32...140 °F), or -40...+70 °C (-40...+158 °F), depending on switch model. See [page 9](#). 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 www.rockwellautomation.com/literature, describes some important differences between solid state equipment and hard-wired electromechanical devices.
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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.



ATTENTION: This equipment is intended for use in a Pollution Degree 2 industrial environment, in overvoltage Category II applications (as defined in IEC 60664-1), at altitudes up to 2000 m (6562 ft) without derating. This equipment is considered Group 1, Class A industrial equipment according to IEC/CISPR 11. Without appropriate precautions, there may be difficulties with electromagnetic compatibility in residential and other environments due to conducted and radiated disturbances. This equipment is supplied as open-type equipment. It must be mounted within an enclosure that is suitably designed for those specific environmental conditions that will be present and appropriately designed to prevent personal injury resulting from accessibility to live parts. The enclosure must have suitable flame-retardant properties to prevent or minimize the spread of flame, complying with a flame spread rating of 5VA or be approved for the application if non-metallic. The interior of the enclosure must be accessible only by the use of a tool. Subsequent sections of this publication may contain additional information regarding specific enclosure type ratings that are required to comply with certain product safety certifications.

In addition to this publication, see the following:

- Industrial Automation Wiring and Grounding Guidelines, publication [I770-4.1](#), for additional installation requirements
 - NEMA 250 and IEC 60529, as applicable, for explanations of the degrees of protection provided by different types of enclosure
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North American Hazardous Location Approval

The following information applies when operating this equipment in hazardous locations:

Products marked "CL I, DIV 2, GP A, B, C, D" are suitable for use in Class I Division 2 Groups A, B, C, D, Hazardous Locations and nonhazardous locations only.

Each product is supplied with markings on the rating nameplate indicating the hazardous location temperature code. When combining products within a system, the most adverse temperature code (lowest "T" number) may be used to help determine the overall temperature code of the system. Combinations of equipment in your system are subject to investigation by the local authority having jurisdiction at the time of installation

**WARNING: EXPLOSION HAZARD**

- Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.
 - Do not disconnect connections to this equipment unless power has been removed or the area is known to be nonhazardous. Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.
 - Substitution of components may impair suitability for Class I, Division 2.
 - If this product contains batteries, they must be changed only in an area known to be nonhazardous.
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Informations sur l'utilisation de cet équipement en environnements dangereux:

Les produits marqués "CL I, DIV 2, GP A, B, C, D" ne conviennent qu'à une utilisation en environnements de Classe I Division 2 Groupes A, B, C, D dangereux et non dangereux. Chaque produit est livré avec des marquages sur sa plaque d'identification qui indiquent le code de température pour les environnements dangereux. Lorsque plusieurs produits sont combinés dans un système, le code de température le plus défavorable (code de température le plus faible) peut être utilisé pour déterminer le code de température global du système. Les combinaisons d'équipements dans le système sont sujettes à inspection par les autorités locales qualifiées au moment de l'installation

**AVERTISSEMENT: RISQUE D'EXPLOSION**

- Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher l'équipement.
 - Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher les connecteurs. Fixer tous les connecteurs externes reliés à cet équipement à l'aide de vis, loquets coulissants, connecteurs filetés ou autres moyens fournis avec ce produit.
 - La substitution de composants peut rendre cet équipement inadapté à une utilisation en environnement de Classe I, Division 2.
 - S'assurer que l'environnement est classé non dangereux avant de changer les piles.
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European Hazardous Location Approval

The following applies to products marked   II 3 G: Such modules:

- are Equipment Group II, Equipment Category 3, and comply with the Essential Health and Safety Requirements relating to the design and construction of such equipment given in Annex II to Directive 94/9/EC. See the EC Declaration of Conformity at <http://www.rockwellautomation.com/products/certification> for details. The type of protection used is "Ex nA IIC T4 Gc or Ex nA IIC T5 Gc" according to EN 60079-0:2012.
 - are intended for use in areas in which explosive atmospheres caused by gases, vapors, mists, air or dust mixtures are unlikely to occur, or are likely to occur only infrequently and for short periods. Such locations correspond to Zone 2 classification according to ATEX directive 1999/92/EC.
 - comply to Standards: 60079-0:2012 and 60079-15:2010, reference certificate number DEMK013 ATEX 7917321X.
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WARNING: Special Conditions for Safe Use:

- This equipment shall be mounted in an ATEX certified enclosure with a minimum ingress protection rating of at least IP54 (as defined in IEC60529) and used in an environment of not more than Pollution Degree 2 (as defined in IEC 60664-1) when applied in Zone 2 environments. The enclosure must utilize a tool removable cover or door.
 - This equipment shall be used within its specified ratings that are defined by Rockwell Automation.
 - Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.
 - Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.
 - Provision shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 140% of the rated voltage when applied in Zone 2 environments.
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Elektrikli ve elektronik esyalarda bazı zararlı maddelerin kullanımının sınırlandırılmansına dair yönetmelik.
EEE Yönetmeliğine Uygunudur. (In Conformity with EEE Regulation)

Before You Begin

Observe these guidelines before installing a Stratix® 2000 switch:

- For 10/100/1000 ports, the cable length from a switch to an attached device cannot exceed 100 m (328 ft).
 - Clearance to front and rear panels must meet these conditions:
 - Front-panel status indicators can be easily read.
 - Access to ports is sufficient for unrestricted cabling.
 - DC (or AC) power connectors are within reach of the connection to their power source.
 - To help prevent the switch from overheating, observe the following minimum clearances:
 - Top and bottom: 50.80 mm (2 in.)
 - Sides: 50.80 mm (2 in.)
 - Front: 63.50 mm (2.50 in.)
 - Temperature surrounding the unit must not exceed 60 °C (140 °F) for 1783-US5T and 1783-US8T switches or 70 °C (158 °F) for all other switches.
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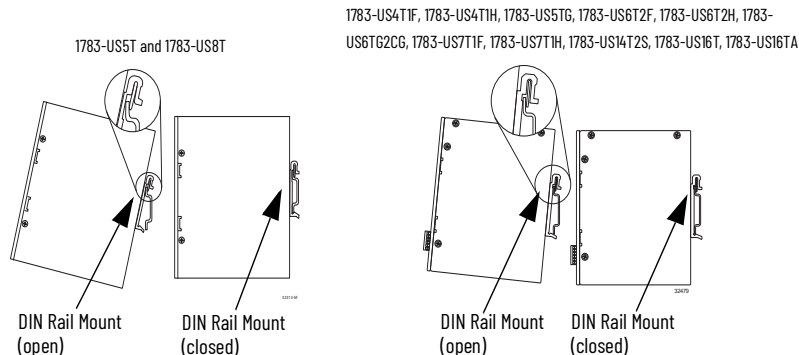


ATTENTION: When using DIN rail mounting, additional grounding is also accomplished through the DIN rail to chassis ground. Use zinc-plated yellow-chromate steel DIN rail to help with proper grounding. The use of other DIN rail materials (for example, aluminum or plastic) that can corrode, oxidize, or are poor conductors, can impede proper grounding. Secure DIN rail to mounting surface approximately every 200 mm (7.8 in.).

Install the Switch on a DIN Rail

Follow these procedures to install the switch on a DIN rail.

1. Allow sufficient clearance between devices for ventilation and electrical isolation that are based on the clearances listed in the Before You Begin section.
2. Position the switch so that the top of the DIN rail mounting clip is slightly above the upper DIN rail edge.
3. With the bottom of the switch angled away from the panel, slide the switch downward until the mounting clip spring is behind the top edge of the DIN rail.
4. Press the switch downward to compress the spring.
5. Press the bottom of the switch toward the panel until the clip locks into place over the bottom edge of the DIN rail.



Remove the Switch from a DIN Rail

1. Gently push the switch downward to compress the mounting clip spring.
2. Rotate the bottom of the switch away from the DIN rail until the bottom of the mounting clip is clear of the lower rail.
3. Lift the switch up until the mounting clip and springs clear the upper DIN rail.

Wire the Switch

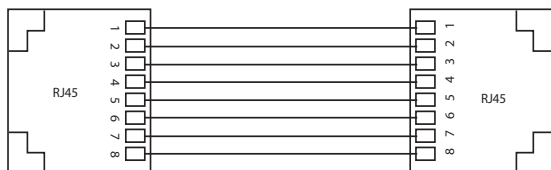
You can wire the switch for connection to the Ethernet network via copper or fiber ports.

For simplified cabling, the switch supports automatic medium dependent interface crossover (auto-MDIX). With auto-MDIX, the switch detects the required cable type for copper Ethernet connections and configures the interfaces accordingly. You can use either crossover or straight-through cables for connections to the switch's 10/100/1000 Ethernet ports, regardless of the type of device on the other end of the connection.

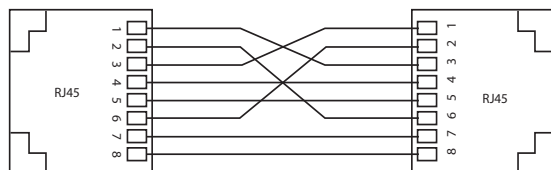
Use either straight-through or crossover style, twisted four-pair, Category 5e or better cables with RJ45 connectors to connect to the switch Ethernet ports.

Wiring Connections and Pins - 10/100 Copper Ports

Straight-through Cable



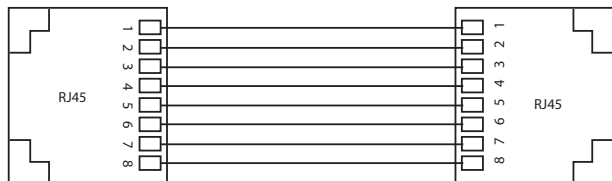
Crossover Cable



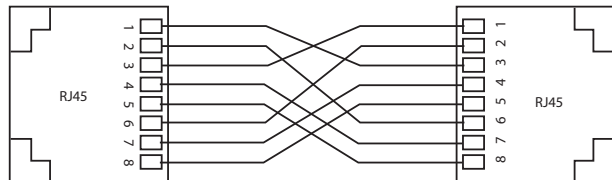
Pins	MDI-X Signal (+ and - represent the polarity of a wire)	MDI Signal
1	RD+	TD+
2	RD-	TD-
3	TD+	RD+
6	TD-	RD-
4, 5, 7, 8	Not used	Not used

Wiring Connections and Pins - 10/100/1000 Copper Ports

Straight-through Cable



Crossover Cable



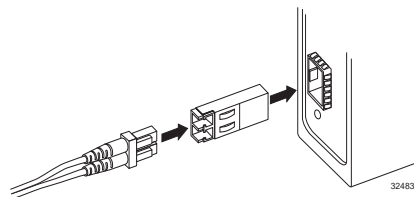
Pins	MDIX Signal (+ and - represent the polarity of a wire)	MDI Signal
1	TRD1+	TRD0+
2	TRD1-	TRD0-
3	TRD0+	TRD1+
4	TRD3+	TRD2+
5	TRD3-	TRD2-
6	TRD0-	TRD1-
7	TRD2+	TRD3+
8	TRD2-	TRD3-

Connect the SFP Module

Optical SFP communications modules provided by the end customer are to be limited to ATEX/IECEx Zone 2 certified with a temperature code equivalent (or better) than the certified equipment.



ATTENTION: Class 1 laser product. Laser radiation is present when the system is open and interlocks bypassed. Only trained and qualified personnel should be allowed to install, replace, or service this equipment.



SFP Module Parameters

Parameter	Multimode	Singlemode
Central wavelength (nm)	1310	1310
Transmission distance (km)	2	20
Applicable distance (km)	0...2	0...20
Luminous power, min (db)	-19	-10
Luminous power, max (db)	-10	-5
Receiving sensitivity (dBm)	-31	-34
Overload luminous power	-3	-3

Connect the Power Supply



WARNING: Before performing any of the following procedures, make sure that power is removed from the DC circuit or the area is nonhazardous before proceeding.



ATTENTION: To comply with the CE Low Voltage Directive (LVD), this equipment must be powered from a source compliant with the safety extra low voltage (SELV) or protected extra low voltage (PELV). To comply with UL restrictions, this equipment must be powered from a source compliant with Class 2 or Limited Voltage/Current.

Keep the following in mind when connecting the power supply to the switch:

- Use the supplied 3-pole, 5.08 mm (0.20 in.) or 5-pole 5.08 mm (0.20 in.) pitch terminal block to connect the power wire.
- Use wires of 2.5...0.75 mm² (14...18 AWG).
- Grounding resistance must be <2.5 Ω

Diagram	Pin	For DC Wiring	For AC Wiring
1783-US5T and 1783-US8T			
	1	PWR: +	PWR: L
	2	PWR: -	PWR: N
	3	Functional Ground (FE)	Functional Ground (FE)

1783-US4T1F, 1783-US4T1H, 1783-US5TG, 1783-US6T2F, 1783-US6T2H, 1783-US6TG2CG, 1783-US7T1F, 1783-US7T1H, 1783-US14T2S, 1783-US16T, 1783-US16TA

	1	PWR1:+	PWR1:L
	2	PWR1:-	PWR1:N
	3	Functional Ground (FE)	Functional Ground (FE)
	4	PWR2: -	PWR2: N
	5	PWR2: +	PWR2: L

Follow this procedure to connect the power supply to the switch.

1. Disconnect the power terminal connector (on top of the switch) from the switch.
2. Insert the power wires into the power terminal connector.



ATTENTION: This product is intended to be mounted to a well-grounded mounting surface, such a metal panel. For safety and maximum noise immunity, the switch must be grounded by using the Protective Ground (PE) grounding screw on the housing. Functional earth ground (FE) is internally connected to the PE ground. FE ground may be used to ground the DC power supply, for example. The PE chassis ground must be connected to a reliable earth ground at all times.

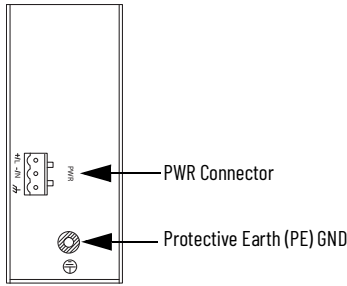
For proper polarity of the power wiring, use the cable pinout or the diagram on the switch label.

3. Tighten the power connector by using a screwdriver.
Torque must not exceed 0.5 N•m (4.42 lb•in).
4. Plug the power connector back into the device.
Be sure that the terminal is connected securely.

Ground the Switch

The switch has two grounding points, as follows:

- Functional Earth Ground (FE) in the power connector on the top of the switch
- Protective Ground (PE) on the switch housing



Keep these points regarding grounding in mind:

- Grounding resistance for PE must be less than 2.5 Ω.
- For proper grounding, use a suitable ring terminal for the chassis PE ground screw, and minimum 2.5 mm² (14 AWG) wire.
- Torque must not exceed 1.82 N•m (16.10 lb•in).

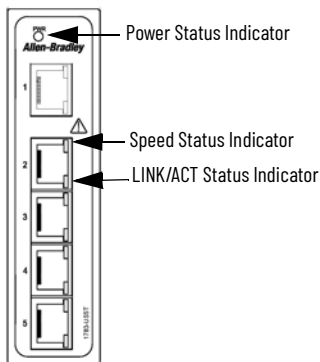
Apply Power to the Switch

Once you apply power to the switch, if the ports are operating normally, the following happens:

- The port status indicators flash for a short time.
- The PWR status indicator is on continuously.

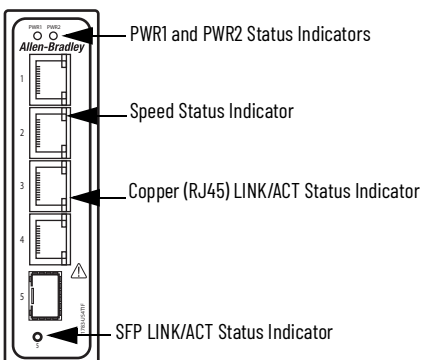
Status Indicators

This illustration shows the 1783-US5T switch. These status indicators are the same as on the 1783-US8T switch.



Indicator	Status	Description
PWR	On	Power is connected and operates normally
	Off	Power is not connected or operates abnormally
SPEED (Yellow)	On	100 M working state (for example, 100Base-TX)
	Off	10 M working state (for example, 10Base-T)
LINK/ACT (Green)	On	Network is available
	Blinking	Network activity on the port
	Off	No network activity on the port

This illustration shows the 1783-US4T1F switch. These status indicators are the same as on the remaining switches.



Indicator	Status	Description
PWR1	On	PWR1 is connected and operates normally
	Off	PWR1 is not connected or operates abnormally
PWR2	ON	PWR2 is connected and operates normally
	OFF	PWR2 is not connected or operates abnormally
SPEED (Yellow)	On	100 M working state (for example, 100Base-TX)
	Off	10 M working state (for example, 10Base-T)
LINK/ACT (Green)	On	Network is available
	Blinking	Network activity on the port
	Off	No network activity on the port

Specifications

Attribute	1783-US5T, 1783-US8T	1783-US4T1F, 1783-US4T1H, 1783-US5TG, 1783-US6T2F, 1783-US6T2H, 1783-US6TG2CG, 1783-US7T1F, 1783-US7T1H, 1783-US14T2S, 1783-US16T, 1783-US16TA
Wire size, power connectors	0.82...2.1 mm ² (18...14 AWG) solid or stranded copper wire that is rated at 105 °C (221 °F) or greater.	
Wire size, chassis ground connection	2.5 mm ² (14 AWG) min	2.5 mm ² (14 AWG) min
Screw torque, chassis protective earth ground terminal (PE)	1.82 N•m (16.10 lb•in) Torque must not exceed 1.82 N•m	1.82 N•m (16.10 lb•in) Torque must not exceed 1.82 N•m
Screw torque, power terminals	0.4 N•m (3.5 lb•in)...0.5 N•m (4.4 lb•in)	0.4 N•m (3.5 lb•in)...0.5 N•m (4.4 lb•in)
Power supply	Input voltage 24V DC/AC (18...60V DC; 18...30V AC) Temperature rating 75 °C (167 °F) only for the field installed conductors.	Input voltage 24V DC/AC (18...60V DC; 18...30V AC) Temperature rating 75 °C (167 °F) only for the field installed conductors.

Cat. No.	Nominal Voltage	Voltage Range DC (Class 2 Power Source)	Voltage Range AC (Class 2 Power Source)	Operating Temperature	Ratings	Temperature Code	ATEX String
1783-US5T	24V DC	18...60V DC	18...30V AC	0...60 °C (32...140 °F)	250 mA max, 2 W max	T5	Ex nA IIC T5 Gc
1783-US8T	24V DC	18...60V DC	18...30V AC	0...60 °C (32...140 °F)	361 mA max, 4.04 W max	T5	Ex nA IIC T5 Gc
1783-US7T1F 1783-US7T1H	24V DC	18...60V DC	18...30V AC	-40...+70 °C (-40...+158 °F)	442.3 mA, 5.927 W max	T4	Ex nA IIC T4 Gc
1783-US6T2F 1783-US6T2H	24V DC	18...60V DC	18...30V AC	-40...+70 °C (-40...+158 °F)	442.3 mA, 5.927 W max	T4	Ex nA IIC T4 Gc
1783-US16T 1783-US16TA	24V DC	18...60V DC	18...30V AC	-40...+70 °C (-40...+158 °F)	555.5 mA, 6.72 W max	T4	Ex nA IIC T4 Gc
1783-US14T2S	24V DC	18...60V DC	18...30V AC	-40...+70 °C (-40...+158 °F)	663.2 mA, 7.991 W max	T4	Ex nA IIC T4 Gc
1783-US4T1F 1783-US4T1H	24V DC	18...60V DC	18...30V AC	-40...+70 °C (-40...+158 °F)	230.5 mA, 2.841 W max	T4	Ex nA IIC T4 Gc
1783-US5TG	24V DC	18...60V DC	18...30V AC	-40...+70 °C (-40...+158 °F)	432.1 mA, 5.491 W max	T4	Ex nA IIC T4 Gc
1783-US6TG2CG	24V DC	18...60V DC	18...30V AC	-40...+70 °C (-40...+158 °F)	1242.7 mA, 13.643 W max	T4	Ex nA IIC T4 Gc

Additional Resources

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

Resource	Description
Stratix Ethernet Device Specifications Technical Data, publication 1783-TD001	Provides specifications for the switches and other devices.
Stratix 2000 Ethernet Unmanaged Switches, publication 1783-UM011	Describes broadcast storm protection, DIP switches, and status indicators for the switches.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation® industrial system.
Product Certification website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>.

Rockwell Automation Support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, and product notification updates.	rok.auto/support
Knowledgebase	Access Knowledgebase articles.	rok.auto/knowledgebase
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Literature Library	Find installation instructions, manuals, brochures, and technical data publications.	rok.auto/literature
Product Compatibility and Download Center (PCDC)	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	rok.auto/pcdc

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Waste Electrical and Electronic Equipment (WEEE)



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

Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/pec.

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