



Stratix 2100 Ethernet Unmanaged Switches

Catalog Numbers: 1783-USP5T, 1783-USP5TG, 1783-USP5TGK, 1783-USP8T, 1783-USP8TG, 1783-USP8TGK, 1783-USP1S4T, 1783-USP1SG4TG, 1783-USP1TG4TGE, 1783-USP1S7T, 1783-USP2S6T, 1783-USP2SG8TG, 1783-USP16T, 1783-USP16TG, 1783-USP16TGK, 1783-USP2SG16T

Topic	Page
About this Publication	3
Quality of Service (QoS)	3
Energy-Efficient Ethernet (EEE)	3
Broadcast Storm Protection	3
DIP Switches	4
Status Indicators	5
Stratix 2000 to Stratix 2100 Switch Migration	7
Additional Resources	7



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, 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 „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.

주요: 본 제품 설치, 설정, 작동 또는 유지 보수가 하기 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.

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 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 uygulamaya 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、操作或維護本产品前，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 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.

About this Publication

This publication describes how to use and troubleshoot Stratix® 2100 switches.

This manual assumes that you understand the following:

- Local area network (LAN) switch fundamentals
- Concepts and terminology of the Ethernet protocol and local area networking

Inclusive Terminology

Rockwell Automation recognizes that some of the terms that are currently used in our industry and in this publication are not in alignment with the movement toward inclusive language in technology. We are proactively collaborating with industry peers to find alternatives to such terms and making changes to our products and content. Please excuse the use of such terms in our content while we implement these changes.

Quality of Service (QoS)

Quality of Service (QoS) ensures that the most important industrial network traffic receives priority, helping maintain performance and reliability in demanding industrial applications. QoS assigns different priority levels to various types of data so that critical control or time-sensitive communication moves through the network first, even when the system is busy. This helps reduce delays, prevent congestion, and improve overall system responsiveness.

The Stratix 2100 switch provides advanced hardware-supported Quality of Service (QoS) capabilities for optimized performance and prioritization of industrial control traffic such as EtherNet/IP using the weights in [Table 1](#).

Table 1 - Prioritization of Traffic

Queue	Traffic Type	Differentiated Services Code Points (DSCP) Value	8021D Priority
Highest	PTP (IEEE 1588) Event Messages	59	7
	DLR Messages	N/A	
Second Highest	CIP Priority - Urgent (For example, CIP Motion)	55	6
Third Highest	PTP (IEEE 1588) General Messages	47	5
	CIP Priority - Schedule Example: CIP I/O and CIP Safety I/O		
	CIP Priority - High Example: CIP I/O	43	
Lowest	CIP Priority - Low	31	3
	CIP UCMM, CIP Class 2/3, All other EtherNet/IP Encapsulation Messages	27	
	All other frames	All other values	

Energy-Efficient Ethernet (EEE)

Energy-Efficient Ethernet (EEE) is designed to reduce power consumption in Ethernet networks during idle periods. EEE provides the protocol that is needed to transition into and out of Low Power Idle (LPI) mode in a way that is transparent to upper layer protocols and applications. EEE is disabled by default.

Broadcast Storm Protection

A broadcast storm occurs when a network is overwhelmed by continuous multicast or broadcast traffic that is typically caused by loops in the network. A severe broadcast storm can block all other network traffic. The Stratix 2100 switches provide protection against broadcast storms.

Broadcast Storm Protection (BSP) is enabled and disabled via DIP switch. BSP discards broadcast messages after 64 consecutive broadcast messages at a port. The counter resets any non-broadcast message or after 800 ms.

DIP Switches

This section describes the DIP switch design specifications. The DIP switches can be in an “on” or “off” state while each pin connected to the MCU GPIO pins and offers the possibility to rearrange the feature set at a later day without hardware modifications. There is no need to restart the switch, while setting changes of the DIP switches, and it takes effective immediately. SFP speed settings do require a restart to become effective.

The following table describes the number of DIP switches and their behavior. The function of the DIP switches varies by catalog number.

Table 2 - DIP Switch Status

Catalog Number	Number of DIP Switches	Function	Status	Description	Default State		
1783-USP1S4T 1783-USP1TG4TG 1783-USP1TG4TGE 1783-USP2S6T 1783-USP1S7T 1783-USP5T 1783-USP5TG 1783-USP5TGK 1783-USP8T 1783-USP8TG 1783-USP8TGK	4	QoS	On	Enables the QoS function.	On		
			Off	Disables the QoS function.			
		BSP	On	Enables broadcast storm protection.	Off		
			Off	Disables broadcast storm protection.			
		EEE	On	Enabled the Energy-Efficient Ethernet.	Off		
			Off	Disabled the Energy-Efficient Ethernet.			
		MAC FF	On	Enables reserved control frame filtering.	Off		
			Off	Disables reserved control frame filtering.			
		1783-USP1SG4TG	6	QoS	On	Enables the QoS function.	On
					Off	Disables the QoS function.	
				BSP	On	Enables broadcast storm protection.	Off
					Off	Disables broadcast storm protection.	
EEE	On			Enabled the Energy-Efficient Ethernet.	Off		
	Off			Disabled the Energy-Efficient Ethernet.			
MAC FF	On			Enables reserved control frame filtering.	Off		
	Off			Disables reserved control frame filtering.			
SFP G1	On			Sets SFP port speed at 100M	Off		
	Off			Sets SFP port speed at 1G.			
Reserved					Off		
1783-USP2SG8TG	6			QoS	On	Enables the QoS function.	On
		Off	Disables the QoS function.				
		BSP	On	Enables broadcast storm protection.	Off		
			Off	Disables broadcast storm protection.			
		EEE	On	Enabled the Energy-Efficient Ethernet.	Off		
			Off	Disabled the Energy-Efficient Ethernet.			
		MAC FF	On	Enables reserved control frame filtering.	Off		
			Off	Disables reserved control frame filtering.			
		SFP G1	On	Forces SFP port G1 speed at 100M.	Off		
			Off	Forces SFP port G1 speed at 1G.			
		SFP G2	On	Sets SFP port G2 speed at 100M.	Off		
			Off	Sets SFP port G2 speed at 1G.			

Table 2 - DIP Switch Status

Catalog Number	Number of DIP Switches	Function	Status	Description	Default State
1783-USP16T 1783-USP16TG 1783-USP16TGK	8	QoS	On	Enables the QoS function.	On
			Off	Disables the QoS function.	
		BSP	On	Enables broadcast storm protection.	Off
			Off	Disables broadcast storm protection.	
		EEE	On	Enabled the Energy-Efficient Ethernet.	Off
			Off	Disabled the Energy-Efficient Ethernet.	
		MAC FF	On	Enables reserved control frame filtering.	Off
			Off	Disables reserved control frame filtering.	
		PWR1 FLT	On	Enables Power1 Fault alarm.	Off
			Off	Disables Power1 Fault alarm.	
		PWR2 FLT	On	Enables Power2 Fault alarm.	Off
			Off	Disables Power2 Fault alarm.	

Status Indicators

The images below show both a switch with and without a fault status indicator.



Table 3 - Status Indicators

Indicator	Color	Status	Description
PWR1	Green	On	Voltage in operating voltage range is supplied to PWR1 terminals.
		Off	NO Voltage in operating voltage range is supplied to PWR1 terminals.
PWR2	Green	On	Voltage in operating voltage range is supplied to PWR2 terminals.
		Off	NO Voltage in operating voltage range is supplied to PWR2 terminals.
VOLT FLT ⁽¹⁾	Yellow	On	NO Voltage in operating voltage range is supplied to at least one terminal, where the respective DIP switch is set to "ON".
		Off	Either both respective DIP switches are off or there is voltage in operating voltage range that is supplied to all PWR terminals with activated DIP switch.

(1) Only for devices with fault relay.

RJ45 Port 10/100 Mbit/s Status Indicators



Table 4 - RJ45 Fast Ethernet Port Status Indicators

Indicator	Color	Status	Description
Upper LED	—	Off	Link is down
	Green	On	The port has an operating network connection
	Green	Blinking	Active
Lower LED	Yellow	On	The port is operating at 100 Mbps
	—	Off	The port is operating at 10 Mbps or Link is down

RJ45 Port 10/100/1000 Mbit/s

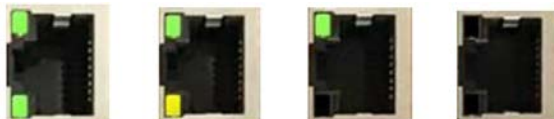


Table 5 - RJ45 Gigabit Ethernet Port Status Indicators

Indicator	Color	Status	Description
Upper LED	—	Off	Link is down
	—	On	The port has an operating network connection
	—	Blinking	Active
Lower LED	Green	On	The port is operating at 1000 Mbps
	Yellow	On	The port is operating at 100 Mbps or Link is down
	—	Off	The port is operating at 10 Mbps or Link is down

SFP Port 10/100/1000 Mbits/s

Table 6 - SFP Gigabit Ethernet Port Status Indicators

Indicator	Color	Status	Description
Dual-color status indicator	Yellow	Off	Link is down
		On	The port has an operating network connection
		Blinking	Active
	Green	Off	The port is operating at 1000 Mbps
		On	The port is operating at 100 Mbps or Link is down
		Blinking	The port is operating at 10 Mbps or Link is down

Stratix 2000 to Stratix 2100 Switch Migration

The Stratix 2000 to Stratix 2100 switch migration information is listed in [Table 7](#).

Table 7 - Stratix 2000 and Stratix 2100 Switch Comparison Table

Stratix 2000	Stratix 2100	Total Ports	FE-Ports	GE-Ports	FE-SFP Ports	GE-SFP Ports	PoE-GE Ports	Conformal Coated	Dimensions in mm (HxDxW)
1783-US4T1F	1783-USP1S4T	5	4	—	1	—	—	—	114 x 70 x 26
1783-US4T1H									
1783-US5T	1783-USP5T	5	5	—	—	—	—	—	114 x 70 x 26
1783-US5TG	1783-USP5TG	5	—	5	—	—	—	—	114 x 70 x 26
—	1783-USP5TGK	5	—	5	—	—	—	Yes	114 x 70 x 26
1783-US7T1F	1783-USP1S7T	8	7	—	1	—	—	—	114 x 70 x 44
1783-US7T1H									
1783-US6T2F	1783-USP2S6T	8	6	—	2	—	—	—	114 x 70 x 44
1783-US6T2H									
1783-US8T	1783-USP8T	8	8	—	—	—	—	—	114 x 70 x 44
1783-US6T2TG2F	1783-USP2SG8TG	10	—	8	—	2	—	—	114 x 85 x 44
1783-US6T2TG2H									
1783-US8TG2GX									
1783-US16T	1783-USP16T	16	16	—	—	—	—	—	114 x 95 x 44
1783-US16T2S	1783-USP2SG16T	18	16	—	—	2	—	—	114 x 95 x 65

Additional Resources

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

Resource	Description
Stratix 2100 Ethernet Unmanaged Switches Installation Instructions, publication 1783-IN023	Describes how to install Stratix 2100 switches.
Stratix Ethernet Device Specifications Technical Data, publication 1783-TD002	Provides specification information for Stratix 2100 switches and other Ethernet devices.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at rok.auto/literature.

Rockwell Automation Support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, Knowledgebase, and product notification updates.	rok.auto/support
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Technical Documentation Center	Quickly access and download technical specifications, installation instructions, and user manuals.	rok.auto/techdocs
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

Documentation Feedback

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at rok.auto/docfeedback.



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.

Rockwell Otomasyon Ticaret A.Ş. Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400 EEE Yönetmeliğine Uygundur

Connect with us.    

rockwellautomation.com — expanding **human possibility**[®]

AMERICAS: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000

EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2663 0600

ASIA PACIFIC: Rockwell Automation SEA Pte Ltd, 2 Corporation Road, #04-05, Main Lobby, Corporation Place, Singapore 618494, Tel: (65) 6510 6608

UNITED KINGDOM: Rockwell Automation Ltd., Pitfield, Kiln Farm, Milton Keynes, MK11 3DR, United Kingdom, Tel: (44)(1908) 838-800

Allen-Bradley, expanding human possibility, and Rockwell Automation are trademarks of Rockwell Automation, Inc. Trademarks not belonging to Rockwell Automation are property of their respective companies.

Publication 1783-UM016A-EN-P - February 2026

Copyright © 2026 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.