

Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (RFID Tag)

Produktinformation



A5E03357930

Diese Produktinformation enthält wichtige Hinweise. Diese Hinweise ergänzen die Betriebsanleitung für das Bediengerät und sind den Aussagen in der Betriebsanleitung, in den Release Notes und in der Online-Hilfe in der Verbindlichkeit übergeordnet.

Gültigkeit

Diese Produktinformation gilt für folgende Bediengeräte:

- Mobile Panel 277 IWLAN V2

Artikelnummern:

- 6AV6 645-0DD01-0AX1
- 6AV6 645-0DD02-0AX1
- 6AV6 645-0DE01-0AX1
- 6AV6 645-0DE02-0AX1
- 6AV6 645-0FD01-0AX1
- 6AV6 645-0FE01-0AX1



- Mobile Panel 277F IWLAN V2

Artikelnummern:

- 6AV6 645-0EB01-0AX1
- 6AV6 645-0EB02-0AX1
- 6AV6 645-0EC01-0AX1
- 6AV6 645-0EC02-0AX1
- 6AV6 645-0GB01-0AX1
- 6AV6 645-0GC01-0AX1



- Mobile Panel 277F IWLAN V2 RFID

Artikelnummern:

- 6AV6 645-0EF01-0AX1
- 6AV6 645-0EF02-0AX1
- 6AV6 645-0GF01-0AX1



Beachten Sie insbesondere Zulassungen und Zertifikate.

Hinweis

Für das Bediengerät gelten nur die Zulassungen, die auf der Geräterückseite angegeben sind.

Sicherheitshinweise für Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2 und Mobile Panel 277F IWLAN (RFID Tag)

Projektierung

Hinweis

Passende WinCC flexible-Software erforderlich

Verwenden Sie zur Projektierung des Bediengeräts eines der folgenden Software-Pakete:

- "WinCC flexible 2008 SP2" mit "HSP Mobile Panel 277 Wireless V2"
- Eine für die Bediengeräte freigegebene Version WinCC (TIA Portal)

Migrations-GSDML-Datei für Steuerungen ohne erweiterte PROFINET-Diagnose

Das Bediengerät unterstützt die erweiterte PROFINET-Diagnose und kann nur an einem PROFINET IO-Controller betrieben werden, der ebenfalls die erweiterte PROFINET-Diagnose unterstützt.

Um das Bediengerät an einem PROFINET IO-Controller zu betreiben, der die erweiterte PROFINET-Diagnose nicht unterstützt, ist eine Migrations-GSDML-Datei erforderlich.

Sie finden die Migrations-GSDML-Datei für das Bediengerät mit einer Beschreibung der Installation im Internet unter:

Migrations-GSDML-Datei Mobile Panel 277(F) IWLAN V2/(RFID-Tag)
(<http://support.automation.siemens.com/WW/view/de/19241467>)

LAN- und WLAN-Kommunikation

Hinweis

Kommunikation mit mehreren Access Points nur mit iPCF-MC möglich

Ohne iPCF-MC ist die Kommunikation mit mehr als einem Access Point zur Abdeckung eines größeren WLAN-Bereichs nicht unterbrechungsfrei möglich.

Verwenden Sie iPCF-MC für die Kommunikation mit mehreren Access Points zur Abdeckung eines größeren WLAN-Bereichs.

Verwenden Sie nur WPA2 mit AES

Für eine möglichst starke Sicherung der WLAN-Kommunikation verwenden Sie nur WPA2 mit AES. Bei der Wahl geeigneter Kennwörter und Schlüssel, die hinreichend lang und nicht zu erraten sind, gilt dieses Verfahren nach heutigem Stand der Technik als sicher.

Störungsfreies Datennetz erforderlich

Das sichere Funktionieren des Bediengeräts ist nur in einem störungsfreien Datennetz gewährleistet. Störungen, die von außen auf das Funknetz wirken, können z. B. zu einer Überlastung des Bediengeräts führen.

Bei drahtloser Ethernet-basierter Kommunikation, z. B. PROFINET IO, HTTP, Sm@rtAccess, Sm@rtService und OPC, ist der Endnutzer für die Sicherheit des Datennetzes verantwortlich.

Die "Storm Threshold"-Funktion beim Siemens Access Point SCALANCE muss aktiviert sein. Diese Aktivierung ist für einen stabilen Anlagenbetrieb auch bei hoher Netzlast notwendig. Für Broadcast-Telegramme ist Folgendes einzustellen:

- Address Threshold: 255
- Wireless: 255.

IP-Adressen im Datennetz

Der Adressbereich 169.254.2.252 bis 169.254.2.255 ist intern vom Gerät belegt und darf auf keinen Fall im konfigurierten Datennetz enthalten sein.

Um die interne Kommunikation des Geräts nicht zu beeinträchtigen, verwenden Sie keine Adressen aus dem "link-local"-Adressbereich (169.254.*.*).

ACHTUNG

Maximal zulässige Sendeleistung

Beachten Sie abhängig von dem Land, in dem Sie das Bediengerät einsetzen, die maximal zulässige IWLAN-Sendeleistung:

- USA: -14 dBm
- EU-Länder: -11 dBm
- Alle übrigen Länder: -17 dBm

Gehen Sie wie folgt vor, um die Sendeleistung Ihres Bediengeräts einzustellen:

1. Öffnen Sie das Tool "WLAN V2 Config" auf dem Desktop Ihres Bediengeräts.



2. Wählen Sie "Interfaces > WLAN > Advanced".
3. Stellen Sie den Wert "Transmit Power" auf die Sendeleistung ein, die für Ihr Land erlaubt ist.

Umgebungstemperatur

Das Bediengerät ist für den Betrieb bei einer Umgebungstemperatur von 0 °C bis 40 °C ausgelegt.

Hinweis

Laden des Hauptakku im Bediengerät

Ist das Bediengerät eingeschaltet und in der Ladestation eingehängt, dann gilt: Die Ladung des Hauptakku im Bediengerät bleibt bis zu einer Umgebungstemperatur von 40 °C erhalten.

Laden der Akkus in den Ladefächern der Ladestation

Informationen zum Laden der Akkus bei verschiedenen Umgebungstemperaturen finden Sie in der Produktinformation, die der Ladestation beiliegt.

Spezifikation der USB-Schnittstelle

Hinweis

Die USB-Schnittstelle darf ausschließlich zur Inbetriebnahme und für Wartungszwecke verwendet werden.
Die Leitungslänge der angeschlossenen USB-Geräte darf maximal 3 m betragen.

PROFINET IO

Hinweis

Um die Sicherheit Ihrer Applikation zu verbessern, fragen Sie in Ihrer CPU-Applikation das Lebensbit ab. Wenn der Wert des Lebensbits unverändert bleibt, dann ist die PROFINET IO-Kommunikation unterbrochen. Prüfen Sie, ob alle PROFINET IO-Teilnehmer eingeschaltet sind und einwandfrei funktionieren.

Ladestation

Die Ladestation entspricht der Schutzklasse III nach EN 61131-2:2007 und EN 60950-1:2006

Hinweise für Japan

Hinweis

Keine Verbindung zum Access Point auf Kanal 184 bis 192

Wenn Sie das Mobile Panel 277F IWLAN im 5 GHz-Band betreiben und für die WLAN-Verbindung zum Access Point einen der Kanäle 184 bis 192 verwenden, dann kann es sein, dass keine Verbindung zum Access Point hergestellt werden kann. Verwenden Sie nicht die WLAN-Kanäle 184 bis 192, siehe Betriebsanleitung, Kapitel "WLAN-Verbindung parametrieren".

Notes for use in Korea

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

This equipment is Industrial (Class A) electromagnetic wave suitability equipment and seller or user should take notice of it, and this equipment is to be used in the places except for home.

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

This device shall not be used for life-safety related service due to radio interference possibility.

Industrial Security

Siemens bietet Produkte und Lösungen mit Industrial Security-Funktionen an, die den sicheren Betrieb von Anlagen, Systemen, Maschinen und Netzwerken unterstützen.

Um Anlagen, Systeme, Maschinen und Netzwerke gegen Cyber-Bedrohungen zu sichern, ist es erforderlich, ein ganzheitliches Industrial Security-Konzept zu implementieren (und kontinuierlich aufrechtzuerhalten), das dem aktuellen Stand der Technik entspricht. Die Produkte und Lösungen von Siemens formen nur einen Bestandteil eines solchen Konzepts.

Der Kunde ist dafür verantwortlich, unbefugten Zugriff auf seine Anlagen, Systeme, Maschinen und Netzwerke zu verhindern. Systeme, Maschinen und Komponenten sollten nur mit dem Unternehmensnetzwerk oder dem Internet verbunden werden, wenn und soweit dies notwendig ist und entsprechende Schutzmaßnahmen (z. B. Nutzung von Firewalls und Netzwerksegmentierung) ergriffen wurden.

Zusätzlich sollten die Empfehlungen von Siemens zu entsprechenden Schutzmaßnahmen beachtet werden. Weiterführende Informationen über Industrial Security finden Sie unter (<http://www.siemens.de/industrialsecurity>).

Die Produkte und Lösungen von Siemens werden ständig weiterentwickelt, um sie noch sicherer zu machen. Siemens empfiehlt ausdrücklich, Aktualisierungen durchzuführen, sobald die entsprechenden Updates zur Verfügung stehen und immer nur die aktuellen Produktversionen zu verwenden. Die Verwendung veralteter oder nicht mehr unterstützter Versionen kann das Risiko von Cyber-Bedrohungen erhöhen.

Um stets über Produkt-Updates informiert zu sein, abonnieren Sie den Siemens Industrial Security RSS Feed unter (<http://www.siemens.de/industrialsecurity>).

Disclaimer für Fremdsoftware-Updates

Dieses Produkt beinhaltet Fremdsoftware. Für Updates/Patches an der Fremdsoftware übernimmt die Siemens AG die Gewährleistung nur, soweit diese im Rahmen eines Siemens Software Update Servicevertrags verteilt oder von der Siemens AG offiziell freigegeben wurden. Andernfalls erfolgen Updates/Patches auf eigene Verantwortung. Mehr Informationen rund um unser Software Update Service Angebot erhalten Sie im Internet unter Software Update Service (<http://www.automation.siemens.com/mcms/automation-software/de/software-update-service>).

Hinweise zur Absicherung von Administrator-Accounts

Einem Benutzer mit Administratorrechten stehen an dem System weitreichende Zugriffs- und Manipulationsmöglichkeiten zur Verfügung.

Achten Sie daher auf eine angemessene Absicherung der Administrator-Accounts, um unberechtigte Veränderungen zu verhindern. Verwenden Sie dazu sichere Passwörter und nutzen einen Standard-Benutzer-Account für den regulären Betrieb. Weitere Maßnahmen wie beispielsweise der Einsatz von Security-Richtlinien sind nach Bedarf anzuwenden.

Sicherheitshinweise für Mobile Panel 277F IWLAN V2 und Mobile Panel 277F IWLAN (RFID Tag)

Projektierung in STEP 7

| |
|--|
|  WARNUNG |
| NOT-HALT-Taster verzögert ausgewertet |
| Wenn die Zykluszeit für den OB35 kürzer eingestellt ist als die PNIO-Aktualisierungszeit, dann kann es zu Telegrammausfällen und einer verzögerten Auswertung des Ausgangs E-STOP des F_FB_RNG_n kommen. Stellen Sie für die Zykluszeit des OB35 einen höheren Wert als für die PNIO-Aktualisierungszeit ein. |

PROFINET IO

Hinweis

Abhilfe bei sporadischem Einfrieren von Display und Touchscreen

In seltenen Fällen kann es vorkommen, dass das Display und der Touchscreen des Bediengeräts einfrieren, so dass das Gerät nicht mehr bedienbar ist. Unabhängig davon läuft die Kommunikation über die PROFINET-Schnittstelle, z. B. PROFIsafe-Kommunikation, im Hintergrund weiter.

Abhilfe:

1. Bringen Sie die Maschine, mit der das Bediengerät verbunden ist, in den sicheren Zustand.
2. Starten Sie das Bediengerät neu. Entnehmen Sie dazu den Hauptakku aus dem Akkufach und drücken Sie den Resetztaster (siehe auch Betriebsanleitung).

PROFIsafe-Adresse des Geräts in Verbindung mit TIA Portal

Hinweis

PROFIsafe-Adresse "65535"

In Verbindung mit dem TIA Portal wird die automatische Übernahme der PROFIsafe-Adresse aus dem Projekt durch Eingabe des Adresswerts "65535" am Bediengerät nicht unterstützt.

Kommunikation

Funktionsbausteine und Steuerungen

Die folgenden Tabellen zeigen, welche F_FB-Version Sie derzeit für welche F-CPU und deren Firmware-Version verwenden können.

F_FB_MP

| F_FB-Version | S7-300F/400F | S7-1200F | S7-1500F | Bemerkung |
|--------------|--------------|----------------|----------------|---|
| 1.0 | o | - | - | Aus ursprünglicher Benutzerbibliothek übernommene Version |
| 1.2 | o | - | - | Aus ursprünglicher Benutzerbibliothek übernommene Version |
| 1.3 | x | - | o | Erste ausschließlich in TIA Portal integrierte Version |
| 1.4 | x | - | x | Gleichwertig zu V1.3, zur Verwendung in TIA V14 |
| 2.0 | x | - | x | Datentyp der Eingänge MP_DATA und MP_RNG wegen IEC-Konformität von "Word" nach "Int" geändert |
| 3.0 | x | x ¹ | x ² | Gleichwertig zu V2.0, kompatibel zu neuen Firmware-Versionen der Steuerungen |

x Unterstützt

- Nicht unterstützt

o Nicht mehr unterstützt

¹ Unterstützt für Firmware-Version V4.2 oder höher in Verbindung mit TIA Portal V14 Update 2

² Unterstützt für Firmware-Version V2.0 oder höher

F_FB_RNG_4

| F_FB-Version | S7-300F/400F | S7-1200F | S7-1500F | Bemerkung |
|--------------|--------------|----------------|----------------|---|
| 1.0 | o | - | - | Aus ursprünglicher Benutzbibliothek übernommene Version |
| 1.2 | o | - | - | Aus ursprünglicher Benutzbibliothek übernommene Version |
| 1.3 | x | - | o | Erste ausschließlich in TIA Portal integrierte Version |
| 1.4 | x | - | x | Gleichwertig zu V1.3, zur Verwendung in TIA V14 |
| 2.0 | x | - | x | Datentyp der Eingänge MPn_DATA * und MPn_F_KEY * wegen IEC-Konformität von "Word" nach "Int" geändert |
| 3.0 | x | x ¹ | x ² | Gleichwertig zu V2.0, kompatibel zu neuen Firmware-Versionen der Steuerungen |

x Unterstützt

- Nicht unterstützt

o Nicht mehr unterstützt

* MPn wird für Bediengerät 1 ... 4 verwendet

¹ Unterstützt für Firmware-Version V4.2 oder höher in Verbindung mit TIA Portal V14 Update 2

² Unterstützt für Firmware-Version V2.0 oder höher

F_FB_RNG_16

| F_FB-Version | S7-300F/400F | S7-1200F | S7-1500F | Bemerkung |
|--------------|--------------|----------|----------------|---|
| 1.0 | o | - | - | Aus ursprünglicher Benutzbibliothek übernommene Version |
| 1.2 | o | - | - | Aus ursprünglicher Benutzbibliothek übernommene Version |
| 1.3 | x | - | o | Erste ausschließlich in TIA Portal integrierte Version |
| 1.4 | x | - | x | Gleichwertig zu V1.3, zur Verwendung in TIA V14 |
| 2.0 | x | - | x | Datentyp der Eingänge MPn_DATA * und MPn_F_KEY * wegen IEC-Konformität von "Word" nach "Int" geändert |
| 3.0 | x | - | x ¹ | Gleichwertig zu V2.0, kompatibel zu neuen Firmware-Versionen der Steuerungen |

x Unterstützt

- Nicht unterstützt

o Nicht mehr unterstützt

* MPn wird für Bediengerät 1 ... 16 verwendet

¹ Unterstützt für Firmware-Version V2.0 oder höher

Hinweis

Upgrade von Funktionsbausteinen aus TIA V13 SP1 und Zertifizierung

Während des Upgrade auf TIA V14 werden die jeweiligen Funktionsbausteine durch die entsprechende F_FB-Version 1.4 ersetzt, die gleichwertig zur Vorgängerversion ist. Die F_FB-Versionen V1.4 besitzen in Verbindung mit S7-1500F eine geänderte funktionale Signatur. Im Rahmen des Upgrade auf TIA V14 erhalten Sie ein Konvertierungsprotokoll mit einer Zuordnung der vorherigen V13-Signaturen zu den funktionalen Signaturen V14. Mit diesem Konvertierungsprotokoll ist trotz geänderter Signaturen keine erneute Zertifizierung der Funktionsbausteine erforderlich. Weitere Informationen finden Sie im Programmier- und Bedienhandbuch "SIMATIC Safety - Projektieren und Programmieren", Kapitel 1.8.1 "Projekte von STEP 7 Safety V13 SP1 auf V14 hochrüsten" im Internet (<https://support.industry.siemens.com/cs/ww/de/view/54110126>).

Wenn Sie F_FB-Version 2.0 oder höher benötigen, z. B. für IEC-Konformität oder Kompatibilität zu höheren Firmware-Versionen der Steuerungen, dann müssen Sie die Funktionsbausteine erneut zertifizieren.

Upgrade von Funktionsbausteinen aus Vorgängerversionen von TIA V13 SP1

Führen Sie anhand der Beschreibung im TIA-Informationssystem die Migration nach V13 SP1 durch und beachten Sie anschließend den Hinweis "Upgrade von Funktionsbausteinen aus TIA V13 SP1 und Zertifizierung".

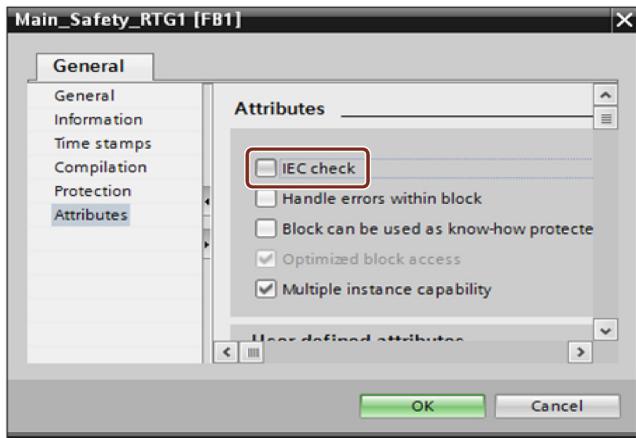
Projektierung von F-FBs <V2.0

Der folgende Hinweis gilt, wenn Sie F-FBs mit einer Version <V2.0 in Ihrer Projektierung verwenden.

Hinweis

IEC-Check deaktivieren

Wenn die Option "IEC-Check" im Funktionsbaustein "Main-Safety" aktiviert ist, dann lässt sich das Projekt nicht komplizieren. Deaktivieren Sie in den Eigenschaften des Funktionsbausteins "Main-Safety" den IEC-Check, siehe folgende Abbildung.



Ausführungszeiten der Funktionsbausteine

Angaben zu den Ausführungszeiten der Funktionsbausteine finden Sie in FAQ 27097159 (<https://support.industry.siemens.com/cs/ww/de/view/27097159>).

Sicherheitsnormen und fehlersicherer Betrieb

Normen zur Betriebssicherheit

TÜV

Der TÜV bestätigt die Einhaltung folgender Normen für die Sicherheitsfunktionen des Bediengeräts:

| Norm | Titel | Ausgabe |
|-------------------|---|---------------|
| DIN EN 60204-1 | Sicherheit von Maschinen – Elektrische Ausrüstung von Maschinen – Teil 1: Allgemeine Anforderungen | 2006 +A1:2009 |
| DIN IEC 62061 | Sicherheit von Maschinen – Funktionale Sicherheit von elektrischen, elektronischen und programmierbaren Steuerungen von Maschinen | 2005 +A2:2015 |
| IEC 61508-1 bis 4 | Sicherheitsintegritätslevel 3 | 2010 |
| ISO 13850 | Sicherheit von Maschinen – NOT-HALT – Gestaltungsleitsätze | 2015 |
| ISO 13849-1 | Performance Level e und Kategorie 4 | 2015 |

Technische Daten zum fehlersicheren Betrieb

- Entsprechend IEC 61508

| | |
|--|------------------------------|
| Hardware-Architektur | Redundant 1oo2 |
| Anforderungsrate | high demand mode |
| Probability of a dangerous failure per hour (PFH) | < $1,00 \times 10^{-10}$ 1/h |
| Probability of a dangerous failure on demand (PFD) | < $1,70 \times 10^{-6}$ |
| Maximal erreichbare Sicherheitsklasse | SIL3 |
| Lebensdauer | 10 Jahre |

- Entsprechend IEC 13849-1

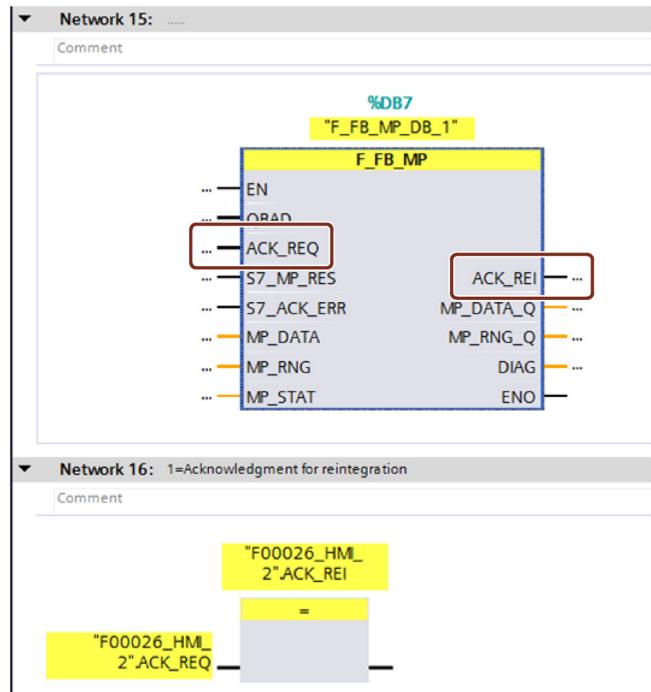
| | |
|-----------------------------|----------|
| Meantime to Failure (MTTFd) | 89 years |
| Diagnostic Coverage | High |
| Performance Level | e |
| Sicherheitskategorie | 4 |

Hinweise zur Verwendung der Geräte mit TIA V13 SP1

PROFIsafe-Kommunikation

Falls sich nach dem Einschalten des Bediengeräts oder nach einem Abbruch der PROFIsafe-Verbindung zu einer F-CPU diese Verbindung nicht von selbst aufbaut, muss am F_FB_MP der Ausgangsparameter ACK_REQ wie folgt verschaltet werden: "ACK_REQ = ACK_REQ", siehe nebenstehendes Beispiel.

Beachten Sie, dass die Ausführungszeit von Netzwerk 16 nicht in der Ausführungszeit der Funktionsbausteine enthalten ist.



Spanische Betriebsanleitung

Aktivierung des NOT-HALT-Tasters

Generell gilt: Der NOT-HALT-Taster ist aktiv, sobald PROFIsafe-Kommunikation aufgebaut ist und somit unabhängig davon, ob das fehlersichere Bediengerät an einer Maschine angemeldet ist oder nicht.

In der spanischen Übersetzung der Betriebsanleitung "Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (RFID Tag)", Ausgabe 01/2011, müssen deshalb z. B. die beiden folgenden Aussagen lauten:

- Kapitel 1.15, Seite 42, erster Listenpunkt: "El siguiente comportamiento de desconexión de la instalación es válido independientemente de si el panel de operador ha iniciado sesión en una máquina o no."
- Kapitel 2.6, Seite 52, zweiter Satz: "El pulsador de parada de emergencia es efectivo en una WLAN independientemente de si el panel de operador ha iniciado sesión en una máquina o no."

WLAN-Kommunikation parametrieren - Fernzugriff

Sie können das Web Based Management zur Parametrierung der WLAN-Kommunikation direkt am Bediengerät oder alternativ über einen Web Browser oder Telnet vornehmen.

Web Based Management mit einem Web Browser

Sie erreichen das Web Based Management mit einem Standard Web Browser über den Port 34965.
Syntax: "http://<IP-Adresse>:34965"

Beispiel: Wenn die IP-Adresse Ihres Bediengeräts "192.168.1.1" lautet, dann geben Sie in der Adressleiste Ihres Web Browsers ein: "http://192.168.1.1:34965".

Web Based Management über Telnet

Sie können die WLAN Konfiguration auch über Telnet konfigurieren. Diesen Dienst erreichen Sie über den Port 34966. Die Zugangsdaten entsprechen denen des Webzugangs.

Normen und Zulassungen

Dieser Abschnitt enthält wichtige Informationen zu Normen und Länderzulassungen des Bediengeräts im Bezug auf das Funksystem.

Hinweis

Die folgende Übersicht informiert Sie über die möglichen Zulassungen.

Für das Bediengerät gelten nur die Zulassungen, die auf der Geräterückseite angegeben sind.

CE-Zulassung



Das Bediengerät stimmt in der von Siemens in Verkehr gebrachten Ausführung mit den Vorschriften der folgenden europäischen Richtlinie überein:

99/5/EG

Richtlinie des europäischen Parlaments und des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über Funkanlagen und Telekommunikationssendeinrichtungen und die gegenseitige Anerkennung ihrer Konformität.

Die Konformität mit den grundlegenden Anforderungen der Richtlinie wird nachgewiesen durch die Einhaltung folgender Normen:

| | |
|----------------------------|---|
| EN 60950 | Sicherheit von Einrichtungen der Informationstechnik |
| EN 301489-1 | Elektromagnetische Verträglichkeit für Funkeinrichtungen und -dienste |
| EN 301489-17 | Spezifische Bedingungen für Breitband-Datenübertragungssysteme und für Einrichtungen in lokalen Hochleistungs-Funknetzen (HIPERLAN) |
| EN 300328 | Elektromagnetische Verträglichkeit und Funkspektrumangelegenheiten (ERM) - Breitband-Übertragungssysteme - Datenübertragungsgeräte, die im 2,4 GHz-ISM-Band arbeiten und Breitband-Modulationstechniken verwenden |
| EN 300440-1 EN 300440-2 | Elektromagnetische Verträglichkeit und Funkspektrumangelegenheiten (ERM) - Funkanlagen mit geringer Reichweite - Funkgeräte zum Betrieb im Frequenzbereich von 1 Ghz bis 40 GHz |
| EN 301893 | Breitband-Funkzugangsnetze (BRAN) - 5-GHz-Hochleistungs-RLAN |
| EN 50371 | Übereinstimmung von elektronischen und elektrischen Geräten kleiner Leistung mit den Basisgrenzwerten für die Sicherheit von Personen in elektromagnetischen Feldern (10 MHz bis 300 GHz) |
| 1999/519/EC | Empfehlung des Rates zur Begrenzung der Exposition der Bevölkerung gegenüber elektromagnetischen Feldern (0 Hz bis 300 GHz) |

An das System angeschlossene Geräte müssen die relevanten Sicherheitsbestimmungen erfüllen.

EU-Konformitätserklärung

Die EU-Konformitätserklärungen werden für die zuständigen Behörden zur Verfügung gehalten bei:

Siemens AG
Digital Factory
Factory Automation
DF FA AS SYS
Postfach 1963
D-92209 Amberg

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, ist jedoch keine Zusicherung von Eigenschaften.

Sie finden die EG-Konformitätserklärung zum Download im Internet unter:

Zertifikate Mobile Panels 277(F) IWLan (<https://support.industry.siemens.com/cs/ww/de/ps/14751/cert>)

UL-Zulassung



Underwriters Laboratories Inc. entsprechend:

- UL 60950-1 – Information Technology Equipment – Safety
Part 1: General Requirements – Edition 2 – Issue Date 2007/03/27
- CSA C22.2 No. 60950-1 (2nd Edition) – Information Technology Equipment – Safety
Part 1: General Requirements – Edition 2 – Issue Date 2007/03/27

Die Zulassung wird nur bei Betrieb mit Hauptakku oder stationär in der Ladestation erfüllt.

Approval according to FCC

This device complies with Part 15 of the FCC Rules

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation.

IEEE802.11b or g operation of this product in the USA is firmware-limited to channels 1 through 11.

Notice

Changes or modifications made to this equipment not expressly approved by SIEMENS may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Notice

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Professional Installation Notice:

To comply with FCC Part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

Within the 5.15-5.25 GHz band, this device is only for indoor use operations to reduce any potential for harmful interference to co-channel MSS operations.

RSS-210 of Industry Canada

"Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

"This device has been designed to operate with internal antennas with a maximum gain of 2 dBi and an antenna impedance of 50 Ohms. Other antennas are strictly prohibited for use with this device."

"To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication."

That the device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems."

"Users should also be cautioned to take note that high power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices."

Länderzulassungen

Hinweis

Die folgende Übersicht informiert Sie über die Funkzulassungen in verschiedenen Ländern.

Für das Bediengerät gelten nur die Zulassungen, die auf der Geräterückseite angegeben sind.

| Country | Identification | Approval granted | Country | Identification | Approval granted | Country | Identification | Approval granted |
|----------------------|----------------|------------------|-----------------|----------------|------------------|--------------------------|----------------|------------------|
| Australia | | ✓ | Hong Kong | | | Portugal | | ✓ |
| Austria | | ✓ | Hungary | | ✓ | Romania | | ✓ |
| Bahrain ¹ | | ✓ | Ireland | | ✓ | Russia | | |
| Belgium | | ✓ | Iceland | | ✓ | Singapore | | |
| Bulgaria | | ✓ | Italy | | ✓ | Slovakia | | ✓ |
| Canada | | ✓ | Japan | | ✓ | Slovenia | | ✓ |
| China | 電訊管理局 | ✓ | Kuwait | | | Spain | | ✓ |
| Cyprus | | ✓ | Latvia | | ✓ | South Africa | | ✓ |
| Czech Republic | | ✓ | Liechtenstein | | ✓ | South Korea | | ✓ |
| Denmark | | ✓ | Lithuania | | ✓ | Sweden | | ✓ |
| Estonia | | ✓ | Luxembourg | | ✓ | Switzerland | | ✓ |
| Finland | | ✓ | Malaysia | | | Taiwan | | ✓ |
| France | | ✓ | Malta | | ✓ | Turkey | | ✓ |
| Germany | | ✓ | The Netherlands | | ✓ | Ukraine | | |
| Great Britain | | ✓ | Norway | | ✓ | United States of America | | ✓ |
| Greece | | ✓ | Poland | | ✓ | | | |

¹ Um das Gerät in Bahrain zu betreiben, müssen Sie sich unter folgender Adresse registrieren:

TRA Bahrain (<http://www.tra.org.bh/en/index>)

SIEMENS

SIMATIC HMI

Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (RFID Tag)

Product Information



A5E03357930

This product information contains important information. These notes supplement the operating instructions for the HMI device and take precedence over statements in the operating instructions, the release notes, and in the online help.

Scope

The product information applies to the following HMI devices:

- Mobile Panel 277 IWLAN V2

Article numbers:

- 6AV6 645-0DD01-0AX1
- 6AV6 645-0DD02-0AX1
- 6AV6 645-0DE01-0AX1
- 6AV6 645-0DE02-0AX1
- 6AV6 645-0FD01-0AX1
- 6AV6 645-0FE01-0AX1



- Mobile Panel 277F IWLAN V2

Article numbers:

- 6AV6 645-0EB01-0AX1
- 6AV6 645-0EB02-0AX1
- 6AV6 645-0EC01-0AX1
- 6AV6 645-0EC02-0AX1
- 6AV6 645-0GB01-0AX1
- 6AV6 645-0GC01-0AX1



- Mobile Panel 277F IWLAN V2 RFID

Article numbers:

- 6AV6 645-0EF01-0AX1
- 6AV6 645-0EF02-0AX1
- 6AV6 645-0GF01-0AX1



Observe the approvals and certificates.

Note

The HMI device itself is certified as shown on the rear panel labels.

Safety notes for Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2 and Mobile Panel 277F IWLAN (RFID Tag)

Configuring

Note

Matching WinCC flexible software required

Configure the HMI device with one of the following software packages:

- "WinCC flexible 2008 SP2" with "HSP Mobile Panel 277 Wireless V2"
- A version of WinCC (TIA Portal) released for the HMI devices.

Migration GSDML file for controllers without extended PROFINET diagnostics

The HMI device supports the expanded PROFIENT diagnostics and can only be operated on a PROFINET IO controller that also supports the expanded PROFINET diagnostics.

A migration GSDML file is required to operate the HMI device on a PROFINET IO controller that does not support the expanded PROFINET diagnostics.

The migration GSDML file for the HMI device, along with an installation guide, can be found online at:

Migration GSDML file Mobile Panel 277 (F) IWLAN V2/(RFID Tag)
(<http://support.automation.siemens.com/WW/view/en/19241467>)

LAN and WLAN communication

Note

Communication with several Access Points is only possible with iPCF-MC

Without iPCF-MC, it is not possible to communicate with more than one Access Point for covering a large WLAN range without interruption.

Use iPCF-MC for communicating with several Access Points to cover a large WLAN range.

Only use WPA2 with AES

For WLAN communication with the highest level of security, only use WPA2 AES. In choosing suitable passwords and keys that must be long enough and difficult to guess, this process meets the latest security measures.

Interference-free data net required

Reliable operation of the HMI device is guaranteed only in a data net free of interference. Interferences which affect the radio network externally may lead to e.g. an overload of the HMI device.

For wireless Ethernet-based communication, e.g. PROFINET IO, HTTP, Sm@artAccess, Sm@rtService and OPC, the end user is responsible for the security of the data network.

The "Storm Threshold" function with Siemens Access Point SCALANCE must be activated. This option has to be selected to ensure stable plant operation when the load on the network is high. The following settings have to be made for broadcast message frames:

- Address threshold: 255
- Wireless: 255.

IP addresses in the data network

The address range 169.254.2.252 to 169.254.2.255 is occupied internally by the device and under no circumstances may be contained in the configured data network.

In order to not influence the internal communication of the device, do not use any addresses from the "link-local" address range (169.254.*.*).

NOTICE

Maximum permissible transmission power

Note the maximum permitted IWLAN transmission power for the country in which you are operating the HMI device:

- USA: -14 dBm
- EU countries: -11 dBm
- All other countries: -17 dBm

Follow these steps to set the transmission power of your HMI device:

1. Open the "WLAN V2 Config" tool on the desktop of your HMI device.



2. Select "Interfaces > WLAN > Advanced".
3. Set the "Transmit Power" value to the transmission power that is permitted for your country.

Ambient temperature

The HMI device has been designed for use with ambient temperatures ranging from 0°C to +40 °C.

Note

Charging the main battery in the HMI device

When the HMI device is turned on and resting in the charging station, the following applies: The main battery charge in the HMI device is retained up to an ambient temperature of 40 °C.

Charging the batteries in the charging compartments of the charging station

Information on charging the batteries at different ambient temperatures is available in the product information included with the charging station.

Specification of USB interface

Note

The USB interface may only be used for commissioning and maintenance purposes.

The maximum line length of the connected USB device is 3 m.

PROFINET IO

Note

To improve the safety of your application, request the life sign bit in your CPU application. If the value of the life sign bit remains unchanged, then the PROFINET IO communication will be interrupted. Check to make sure that all PROFINET IO stations are turned on and work without problems.

Charging station

The charging station corresponds to safety class III according to EN 61131-2:2007 and EN 60950-1:2006.

Notes for Japan

Note

No connection with Access Point on channel 184 to 192

If you operate Mobile Panel 277F IWLAN in a 5 GHz band and are using one of the channels 184 to 192 for WLAN connection with the Access Point, sometimes the connection to the Access Point cannot be established.

Do not use WLAN channels 184 to 192, see Operating Instructions, chapter "Assigning WLAN communication parameters".

Notes for use in Korea

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

This equipment is Industrial (Class A) electromagnetic wave suitability equipment and seller or user should take notice of it, and this equipment is to be used in the places except for home.

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

This device shall not be used for life-safety related service due to radio interference possibility.

Industrial Security

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

Customer is responsible to prevent unauthorized access to its plants, systems, machines and networks. Systems, machines and components should only be connected to the enterprise network or the internet if and to the extent necessary and with appropriate security measures (e.g. use of firewalls and network segmentation) in place.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit (<http://www.siemens.com/industrialsecurity>).

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends to apply product updates as soon as available and to always use the latest product versions. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under (<http://www.siemens.com/industrialsecurity>).

Disclaimer for third-party software updates

This product includes third-party software. Siemens AG only provides a warranty for updates/patches of the third-party software, if these have been distributed as part of a Siemens software update service contract or officially released by Siemens AG. Otherwise, updates/patches are undertaken at your own risk. You can find more information about our Software Update Service offer on the Internet at Software Update Service (<http://www.automation.siemens.com/mcms/automation-software/en/software-update-service>).

Notes on protecting administrator accounts

A user with administrator privileges has extensive access and manipulation options in the system.

Therefore, ensure there are adequate safeguards for protecting the administrator accounts to prevent unauthorized changes. To do this, use secure passwords and a standard user account for normal operation. Other measures, such as the use of security policies, should be applied as needed.

Security information for Mobile Panel 277 IWLAN V2 and Mobile Panel 277F IWLAN (RFID Tag)

Configuration in STEP 7

| |
|--|
|  WARNING |
| Emergency stop button evaluated with delay |
| If the cycle time set at OB35 is shorter than the PNIO update time, you risk message frame failures and delayed evaluation of the "E-STOP" output of F_FB_RNG_n. |
| Set the cycle time of the OB35 to a higher value than for the PNIO update time. |

PROFINET IO

Note

Solution for sporadic freezing of display and touch screen

In rare cases, it can occur that the display and the touch screen of the HMI device freeze so that the device can no longer be operated. Independent of this, communication over the PROFINET interface, for example, PROFIsafe communication, continues in the background.

Solution:

1. Bring the machine to which the HMI device is connected into a safe state.
2. Restart the HMI device. Remove the main rechargeable battery from the battery compartment and press the Reset button (refer also to the operating instructions).

PROFIsafe address of the device in connection with TIA Portal

Note

PROFIsafe address "65535"

In connection with the TIA Portal, the PROFIsafe address is not automatically applied from the project by entering the address value "65535" on the HMI device.

Communication

Function blocks and controllers

The tables below show which F_FB version you can currently use for which F-CPU and its firmware version.

F_FB_MP

| F_FB version | S7-300F/400F | S7-1200F | S7-1500F | Comment |
|--------------|--------------|----------------|----------------|--|
| 1.0 | o | - | - | Version transferred from original user library |
| 1.2 | o | - | - | Version transferred from original user library |
| 1.3 | x | - | o | First version exclusively integrated in TIA Portal |
| 1.4 | x | - | x | Equivalent to V1.3, for use in TIA V14 |
| 2.0 | x | - | x | Data type of the inputs MP_DATA and MP_RNG changed from "Word" to "Int" for IEC conformity |
| 3.0 | x | x ¹ | x ² | Equivalent to V2.0, compatible with the new firmware versions of the controllers |

x supported

- not supported

o no longer supported

¹ Supported for firmware version V4.2 or higher in connection with TIA Portal V14 Update 2

² Supported for firmware version V2.0 or higher

F_FB_RNG_4

| F_FBF version | S7-300F/400F | S7-1200F | S7-1500F | Comment |
|---------------|--------------|----------------|----------------|---|
| 1.0 | o | - | - | Version transferred from original user library |
| 1.2 | o | - | - | Version transferred from original user library |
| 1.3 | x | - | o | First version exclusively integrated in TIA Portal |
| 1.4 | x | - | x | Equivalent to V1.3, for use in TIA V14 |
| 2.0 | x | - | x | Data types of the inputs MPn_DATA * and MPn_F_KEY * changed from "Word" to "Int" for IEC conformity |
| 3.0 | x | x ¹ | x ² | Equivalent to V2.0, compatible with the new firmware versions of the controllers |

x supported

- not supported

o no longer supported

* MPn is used for HMI device 1 ... 4

¹ Supported for firmware version V4.2 or higher in connection with TIA Portal V14 Update 2

² Supported for firmware version V2.0 or higher

F_FB_RNG_16

| F_FBF version | S7-300F/400F | S7-1200F | S7-1500F | Comment |
|---------------|--------------|----------|----------------|---|
| 1.0 | o | - | - | Version transferred from original user library |
| 1.2 | o | - | - | Version transferred from original user library |
| 1.3 | x | - | o | First version exclusively integrated in TIA Portal |
| 1.4 | x | - | x | Equivalent to V1.3, for use in TIA V14 |
| 2.0 | x | - | x | Data types of the inputs MPn_DATA * and MPn_F_KEY * changed from "Word" to "Int" for IEC conformity |
| 3.0 | x | - | x ¹ | Equivalent to V2.0, compatible with the new firmware versions of the controllers |

x supported

- not supported

o no longer supported

* MPn is used for HMI device 1 ... 16

¹ Supported for firmware version V2.0 or higher

Note

Upgrade of function blocks from TIA V13 SP1 and certification

During the upgrade to TIA V14, the respective function blocks are replaced with the corresponding F_FBF version 1.4 blocks that are equivalent to the previous version. The F_FBF versions V1.4 have a modified functional signature in connection with S7-1500F. As part of the upgrade to TIA V14, you receive a conversion protocol with an assignment of the previous V13 signatures to the functional signatures of V14. A new certification of the function blocks is not necessary with this conversion protocol despite the modified signatures. You can find additional information in the Programming and Operating Manual "SIMATIC Safety - Configuring and Programming", section 1.8.1 "Upgrading projects from STEP 7 Safety V13 SP1 to V14" on the Internet (<https://support.industry.siemens.com/cs/www/en/view/54110126>).

If you need F_FBF version 2.0 or higher, for example, for IEC conformity or compatibility with higher firmware versions of the controllers, you must certify the function blocks again.

Upgrade of function blocks from previous versions of TIA V13 SP1

Perform the migration to V13 SP1 as described in the TIA information system. Then read the note on "Upgrade of function blocks from TIA V13 SP1 and certification".

Configuration of F-FBs <V2.0

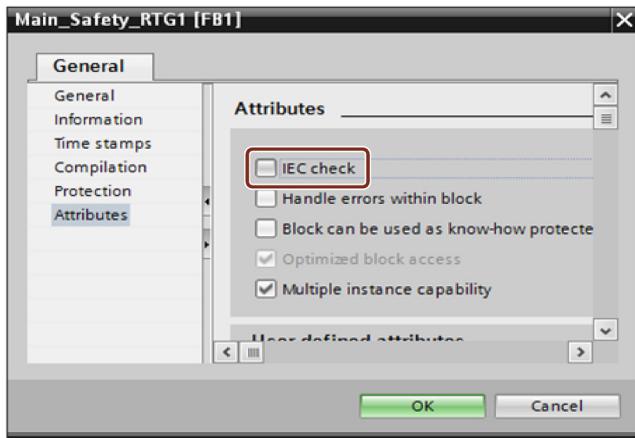
The following note applied when you use F-FBs with a version <V2.0 in your configuration.

Note

Disable IEC check

If the option "IEC check" is enabled in the "Main-Safety" function block, the project cannot be compiled.

Disable the IEC check in the properties of the "Main-Safety" function block. See figure below.



Execution times of function blocks

Information on the execution times of the function blocks is available in the FAQ 27097159 (<https://support.industry.siemens.com/cs/ww/en/view/27097159>).

Safety standards and fail-safe operation

Standards on operating safety

TÜV

The TÜV confirms that the HMI device satisfies the requirements of the standards below with regard to its safety functions:

| Standard | Title | Issue |
|------------------|--|---------------|
| DIN EN 60204-1 | Safety of machinery – Electrical equipment of machines – Part 1: General requirements | 2006 +A1:2009 |
| DIN IEC 62061 | Safety of machinery – Functional safety of safety-related electrical, electronic and programmable electronic control systems | 2005 +A2:2015 |
| IEC 61508-1 to 4 | Safety integrity level 3 | 2010 |
| ISO 13850 | Safety of machinery – Emergency stop – Principles for design | 2015 |
| ISO 13849-1 | Performance Level e and category 4. | 2015 |

Technical specifications for fail-safe operation

- In accordance with IEC 61508

| | |
|--|------------------------------|
| Hardware architecture | Redundant 1oo2 |
| Request rate | High demand mode |
| Probability of a dangerous failure per hour (PFH) | < 1.00×10^{-10} 1/h |
| Probability of a dangerous failure on demand (PFD) | < 1.70×10^{-6} |
| Maximum Safety Level Achievable | SIL3 |
| Useful life | 10 years |

- According to IEC 13849-1

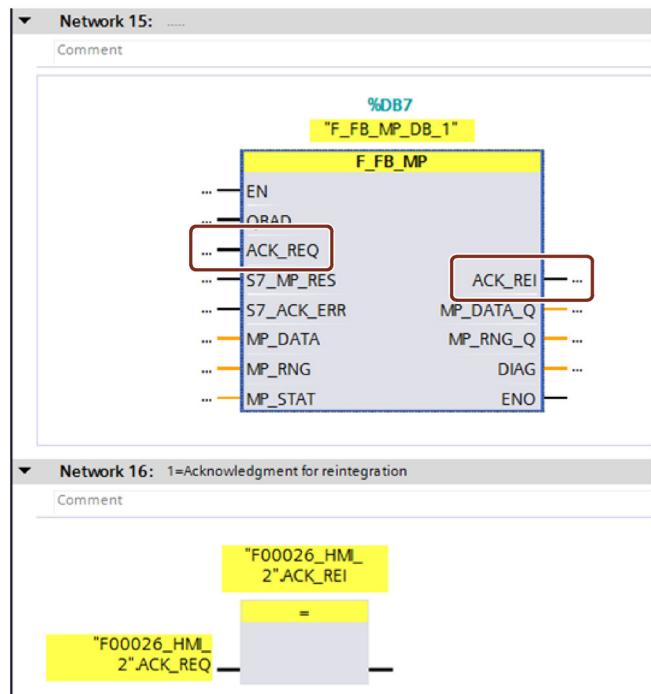
| | |
|------------------------------|----------|
| Mean time to failure (MTTFd) | 89 years |
| Diagnostics coverage | High |
| Performance level | e |
| Safety category | 4 |

Notes on using the devices with TIA V13 SP1

PROFIsafe communication

If this connection is not established automatically when the HMI device is turned on or following an interruption of the PROFIsafe connection to an F-CPU, the output parameter ACK_REI at the F_FB_MP has to be interconnected as follows: "ACK_REQ = ACK_REI", see example to the right.

Please note that the execution time of network 16 is not included in the execution time of the function blocks.



Spanish operating instructions

Activation of the emergency stop button

General rule: The emergency stop button is active as soon as PROFIsafe communication has been established and therefore does not depend on whether the fail-safe HMI device is registered on a machine.

For this reason, in the Spanish translation of the operating instructions "Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (RFID Tag)", Edition 01/2011, the following two statements, for example, should read as follows:

- Section 1.15, page 42, first list item: "El siguiente comportamiento de desconexión de la instalación es válido independientemente de si el panel de operador ha iniciado sesión en una máquina o no."
- Section 2.6, page 52, second sentence: "El pulsador de parada de emergencia es efectivo en una WLAN independientemente de si el panel de operador ha iniciado sesión en una máquina o no."

Parameterizing WLAN communication - remote access

You can perform the Web Based Management to parameterize the WLAN communication directly on the HMI device or alternatively via a web browser or Telnet.

Web Based Management with a web browser

You reach Web Based Management with a standard Web browser via the port 34965.

Syntax: "http://<IP-Adresse>:34965"

Example: If the IP address of your HMI device is "192.168.1.1", then enter the following in the address bar of your Web browser: "http://192.168.1.1:34965".

Web Based Management via Telnet

You can also configure the WLAN configuration via Telnet. You can reach this service via port 34966. The access data corresponds to the web access data.

Standards and approvals

This section includes important information on standards and country approvals regarding the radio system.

Note

The following overview shows the approvals that may be available.

The HMI device itself is certified as shown on the rear panel labels.

CE approval



The HMI device in the version put into circulation by Siemens conforms to the regulations of the following European directive:

99/5/EC

Directive of the European Parliament and of the Council relating to Radio Equipment and Telecommunications Terminal Equipment and the Mutual Recognition of their Conformity.

Compatibility with the basic requirements of the guideline is verified by compliance with the following standards:

| | |
|----------------------------|--|
| EN 60950 | Safety of Information Technology Equipment |
| EN 301489-1 | Electromagnetic Compatibility for Radio Equipment and Services |
| EN 301489-17 | Specific requirements for broadband data transmission systems and for equipment in local high-performance radio networks (HIPERLAN) |
| EN 300328 | Electromagnetic compatibility and Radio spectrum Matters (ERM) - Wideband transmission systems - Data transmission equipment operating in the 2.4 GHz ISM band and using wide band modulation techniques |
| EN 300440-1 EN 300440-2 | Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short range devices - Radio equipment to be used in the 1 GHz to 40 GHz frequency range. |
| EN 301893 | Broadband radio access networks (BRAN) – 5 GHz high-performance RLAN |
| EN 50371 | Compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz) |
| 1999/519/EC | Council recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz) |

Devices connected to the system must meet the relevant safety regulations.

EU Declaration of Conformity

The EU Declarations of Conformity are available to the relevant authorities at the following address:

Siemens AG
Digital Factory
Factory Automation
DF FA AS SYS
Postfach 1963
D-92209 Amberg

This declaration certifies compliance with the directives named above, but does not guarantee any specific properties.

To download information on the EC Declaration of Conformity, go to:

Mobile Panels 277(F) IWLAN certificates (<https://support.industry.siemens.com/cs/ww/en/ps/14751/cert>)

UL approval



Underwriters Laboratories Inc. in accordance with

- UL 60950-1 – Information Technology Equipment – Safety
Part 1: General Requirements – Edition 2 – Issue Date 2007/03/27
- CSA C22.2 No. 60950-1 (2nd Edition) – Information Technology Equipment – Safety
Part 1: General Requirements – Edition 2 – Issue Date 2007/03/27

The approval is only valid in the case of battery operation or when stationary in the charging station.

Approval according to FCC

This device complies with Part 15 of the FCC Rules

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation.

IEEE802.11b or g operation of this product in the USA is firmware-limited to channels 1 through 11.

Notice

Changes or modifications made to this equipment not expressly approved by SIEMENS may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Notice

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Professional Installation Notice:

To comply with FCC Part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

Within the 5.15-5.25 GHz band, this device is only for indoor use operations to reduce any potential for harmful interference to co-channel MSS operations.

RSS-210 of Industry Canada

"Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

"This device has been designed to operate with internal antennas with a maximum gain of 2 dBi and an antenna impedance of 50 Ohms. Other antennas are strictly prohibited for use with this device."

"To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication."

That the device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems."

"Users should also be cautioned to take note that high power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices."

National approvals

Note

The following overview shows wireless approvals in a number of different countries.

The HMI device itself is certified as shown on the rear panel labels.

| Country | Identification | Approval granted | Country | Identification | Approval granted | Country | Identification | Approval granted |
|----------------------|----------------|------------------|-----------------|----------------|------------------|--------------------------|----------------|------------------|
| Australia | | ✓ | Hong Kong | | | Portugal | | ✓ |
| Austria | | ✓ | Hungary | | ✓ | Romania | | ✓ |
| Bahrain ¹ | | ✓ | Ireland | | ✓ | Russia | | |
| Belgium | | ✓ | Iceland | | ✓ | Singapore | | |
| Bulgaria | | ✓ | Italy | | ✓ | Slovakia | | ✓ |
| Canada | | ✓ | Japan | | ✓ | Slovenia | | ✓ |
| China | | ✓ | Kuwait | | | Spain | | ✓ |
| Cyprus | | ✓ | Latvia | | ✓ | South Africa | | ✓ |
| Czech Republic | | ✓ | Liechtenstein | | ✓ | South Korea | | ✓ |
| Denmark | | ✓ | Lithuania | | ✓ | Sweden | | ✓ |
| Estonia | | ✓ | Luxembourg | | ✓ | Switzerland | | ✓ |
| Finland | | ✓ | Malaysia | | | Taiwan | | ✓ |
| France | | ✓ | Malta | | ✓ | Turkey | | ✓ |
| Germany | | ✓ | The Netherlands | | ✓ | Ukraine | | |
| Great Britain | | ✓ | Norway | | ✓ | United States of America | | ✓ |
| Greece | | ✓ | Poland | | ✓ | | | |

¹ In order to operate the device in Bahrain, you must register at the following address:

TRA Bahrain (<http://www.tra.org.bh/en/index>)

SIEMENS

SIMATIC HMI

Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (étiquette RFID)

Information produit



A5E03357930

Cette information produit contient des indications importantes. Ces informations complètent les instructions de service du pupitre opérateur et, en cas de conflit avec les indications contenues dans les instructions de service, des Release Notes et de l'aide en ligne, c'est à elles que vous devez vous reporter.

Validité

Cette information produit est valable pour les pupitres opérateur suivants :

- Mobile Panel 277 IWLAN V2
 - N° d'article :
 - 6AV6 645-0DD01-0AX1
 - 6AV6 645-0DD02-0AX1
 - 6AV6 645-0DE01-0AX1
 - 6AV6 645-0DE02-0AX1
 - 6AV6 645-0FD01-0AX1
 - 6AV6 645-0FE01-0AX1
- Mobile Panel 277F IWLAN V2
 - N° d'article :
 - 6AV6 645-0EB01-0AX1
 - 6AV6 645-0EB02-0AX1
 - 6AV6 645-0EC01-0AX1
 - 6AV6 645-0EC02-0AX1
 - 6AV6 645-0GB01-0AX1
 - 6AV6 645-0GC01-0AX1
- Mobile Panel 277F IWLAN V2 RFID
 - N° d'article :
 - 6AV6 645-0EF01-0AX1
 - 6AV6 645-0EF02-0AX1
 - 6AV6 645-0GF01-0AX1



Veuillez tenir compte des autorisations et des certificats.

Remarque

Les homologations valables pour le pupitre sont uniquement celles indiquées au dos de l'appareil.

Consignes de sécurité pour Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2 et Mobile Panel 277F IWLAN (étiquette RFID)

Configuration

Remarque

Logiciel WinCC flexible approprié requis

Utilisez pour la configuration du pupitre opérateur un des progiciels suivants :

- WinCC flexible 2008 SP2 avec HSP Mobile Panel 277 Wireless V2.
- Une version WinCC (TIA Portal) validée pour le pupitre opérateur

Fichier GSDML de migration pour automates sans diagnostic PROFINET étendu

Le pupitre opérateur prend en charge le diagnostic PROFINET étendu et ne peut être utilisé conjointement à un PROFINET IO-Controller que si ce dernier prend également en charge ce diagnostic.

Pour utiliser le pupitre opérateur avec un PROFINET IO-Controller ne prenant pas en charge le diagnostic PROFINET, un fichier GSDML de migration est requis.

Vous trouvez le fichier GSDML de migration pour le pupitre opérateur avec une description de l'installation sur Internet à l'adresse suivante :

Fichier GSDML de migration Mobile Panel 277(F) IWLAN V2/(étiquette RFID)
(<http://support.automation.siemens.com/WW/view/fr/19241467>)

Communication LAN et WLAN

Remarque

Communication avec plusieurs points d'accès possible uniquement avec iPCF-MC

Sans iPCF-MC, la communication avec plus d'un point d'accès pour la couverture d'une zone WLAN plus grande n'est pas possible sans interruption.

Utilisez iPCF-MC pour la communication avec plusieurs points d'arrêt pour couvrir une zone WLAN plus grande.

Utilisez uniquement WPA2 avec AES

Pour une protection optimale de la communication WLAN, utilisez uniquement WPA2 avec AES. Si des mots de passe et des clés appropriés (assez longs et impossibles à deviner) ont été choisis, cette procédure est considérée selon l'état actuel de la technique comme sûre.

Réseau de données sans perturbation requis

Le fonctionnement sûr du pupitre opérateur n'est garanti que dans un réseau de données sans perturbation. Les perturbations extérieures au réseau radio peuvent p. ex. entraîner une surcharge du pupitre opérateur.

Dans le cas d'une communication basée sur l'Ethernet sans fil, comme p. ex. PROFINET IO, HTTP, Sm@rtAccess, Sm@rtService et OPC, il incombe à l'utilisateur final de veiller à la sécurité du réseau de données.

La fonction "Storm Threshold" doit être activée pour Siemens Access Point SCALANCE. Cette activation est nécessaire pour que le fonctionnement de l'installation soit stable même quand la charge du réseau est élevée. Pour les télégrammes Broadcast, il faut effectuer le paramétrage suivant :

- Address Threshold : 255
- Wireless : 255.

Adresses IP dans le réseau de données

La plage d'adresses 169.254.2.252 à 169.254.2.255 est affectée en interne par l'appareil et ne doit être en aucun cas contenue dans le réseau de données configuré.

Pour ne pas nuire à la communication interne de l'appareil, n'utilisez pas d'adresse comprise dans la plage d'adresses "link-local" (169.254.*.*).

IMPORTANT

Valeur maximale de la puissance émettrice autorisée

En fonction du pays dans lequel le pupitre est utilisé, il convient de tenir compte de la puissance émettrice WLAN maximale admise :

- USA : -14 dBm
- UE : -11 dBm
- Autres pays : -17 dBm

Procédez comme suit pour régler la puissance émettrice du pupitre :

1. Ouvrez l'utilitaire "WLAN V2 Config" sur le bureau du pupitre opérateur.



2. Sélectionnez "Interfaces > WLAN > Advanced".
3. Réglez la valeur "Transmit Power" sur la puissance émettrice admise.

Température ambiante

Le pupitre opérateur est conçu pour une utilisation à des températures ambiantes de 0 °C à 40 °C.

Remarque

Charge de l'accumulateur principal dans le pupitre opérateur

Si le pupitre opérateur est en marche et accroché dans le chargeur, la charge de l'accumulateur principal dans le pupitre opérateur est conservée jusqu'à une température ambiante de 40 °C.

Charge des accumulateurs dans les compartiments de charge du chargeur

Vous trouverez dans les informations produit fournies avec le chargeur des informations sur la charge des accumulateurs à différentes températures ambiantes.

Spécification de l'interface USB

Remarque

L'interface USB ne doit être utilisée que pour la mise en service et à des fins de maintenance.
La longueur de câble maximale des périphériques USB connectés ne doit pas dépasser 3 m.

PROFINET IO

Remarque

Afin d'améliorer la sécurité de votre application, interrogez le bit de vie dans votre application CPU. Lorsque la valeur du bit de vie reste inchangée, la communication PROFINET IO est interrompue. Vérifiez que tous les partenaires PROFINET IO sont mis en route et qu'ils fonctionnent parfaitement.

Chargeur

Le chargeur correspond à la classe de protection III selon EN 61131-2:2007 et EN 60950-1:2006.

Consignes pour le Japon

Remarque

Pas de liaison au point d'accès sur les voies 184 à 192

Lorsque vous faites fonctionner le Mobile Panel 277F IWLAN dans la bande à 5 GHz et utilisez l'une des voies 184 à 192 pour la liaison WLAN au point d'accès, il se peut qu'aucune liaison au point d'accès ne puisse être établie.

N'utilisez pas les voies WLAN 184 à 192, voir le chapitre "Paramétriser une liaison WLAN" des instructions de service.

Notes for use in Korea

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

This equipment is Industrial (Class A) electromagnetic wave suitability equipment and seller or user should take notice of it, and this equipment is to be used in the places except for home.

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할수 없음

This device shall not be used for life-safety related service due to radio interference possibility.

Industrial Security

Siemens commercialise des produits et solutions comprenant des fonctions de sécurité industrielle qui contribuent à une exploitation sûre des installations, systèmes, machines et réseaux

Pour garantir la sécurité des installations, systèmes, machines et réseaux contre les cybermenaces, il est nécessaire d'implémenter (et de préserver) un concept de sécurité industrielle global et moderne. Les produits et solutions de Siemens ne constituent qu'une partie d'un tel concept.

Il incombe au client d'empêcher tout accès non autorisé à ses installations, systèmes, machines et réseaux. Les systèmes, machines et composants doivent uniquement être connectés au réseau d'entreprise ou à Internet si et dans la mesure où c'est nécessaire et si des mesures de protection correspondantes (p. ex. utilisation de pare-feux et segmentation du réseau) ont été prises.

En outre, vous devez tenir compte des recommandations de Siemens concernant les mesures de protection correspondantes. Pour plus d'informations sur la sécurité industrielle, rendez-vous sur <http://www.siemens.com/industrialsecurity>.

Les produits et solutions Siemens font l'objet de développements continus pour être encore plus sûrs. Siemens vous recommande donc vivement d'effectuer des actualisations dès que les mises à jour correspondantes sont disponibles et de ne toujours utiliser que les versions de produit actuelles. L'utilisation de versions obsolètes ou qui ne sont plus prises en charge peut augmenter le risque de cybermenaces.

Afin d'être informé des mises à jour produit dès qu'elles surviennent, abonnez-vous au flux RSS Siemens Industrial Security sous <http://www.siemens.com/industrialsecurity>.

Exclusion de responsabilité pour les mises à jour de logiciels tiers

Ce produit contient des logiciels tiers. Concernant les mises à jour/patchs de logiciels tiers, Siemens AG assure une garantie uniquement si ceux-ci ont été distribués dans le cadre d'un contrat de service de mise à jour logicielle Siemens (Software Update Service) ou s'ils ont été officiellement validés par Siemens AG. Dans le cas contraire, la responsabilité des mises à jour/patchs vous incombe. Pour plus d'informations sur notre offre de mise à jour logicielle Software Update Service, consultez le site Internet Software Update Service (<http://www.automation.siemens.com/mcms/automation-software/en/software-update-service>).

Remarques sur la protection des comptes d'administrateur

Un utilisateur avec des droits d'administrateur dispose de nombreuses possibilités d'accès et de manipulation dans le système.

Veillez donc à protéger de manière adéquate les comptes d'utilisateur afin d'empêcher toute modification non autorisée. Utilisez à cet effet des mots de passe sûrs et un compte d'utilisateur par défaut pour un fonctionnement normal. Appliquez, si nécessaire, d'autres mesures telles que l'utilisation de directives de sécurité.

Consignes de sécurité pour le Mobile Panel 277F IWLan V2 et le Mobile Panel 277F IWLan (étiquette RFID)

Configuration dans STEP 7

| |
|---|
| ATTENTION |
| Bouton-poussoir d'arrêt d'urgence exploité avec retard |
| Si un temps de cycle plus court que le temps d'actualisation PNIO est paramétré pour l'OB 35, il se peut que les télégrammes n'arrivent plus et que l'exploitation de la sortie "E-STOP" du F_FB_RNG_n soit retardée. |
| Choisissez pour le temps de cycle de l'OB35 une valeur supérieure au temps d'actualisation PNIO. |

PROFINET IO

Remarque

En cas de gel sporadique de l'affichage et de l'écran tactile

Il peut arriver parfois que l'affichage et l'écran tactile se figent, rendant l'appareil inutilisable. La communication via l'interface PROFINET, par ex. la communication PROFIsafe, continue en arrière-plan sans être perturbée.

Solution :

1. Placez la machine sur laquelle est branché le pupitre en mode sécurisé.
2. Redémarrez le pupitre opérateur. Pour ce faire, retirez l'accu principal et appuyez sur la touche Reset (voir aussi les instructions de service).

Adresse PROFIsafe de l'appareil en lien avec TIA Portal

Remarque

Adresse PROFIsafe "65535"

En lien avec TIA Portal, la récupération automatique de l'adresse PROFIsafe provenant du projet par la saisie de la valeur "65535" au pupitre n'est pas prise en charge.

Communication

Blocs fonctionnels et automates

Les tableaux suivants montrent la version F_FB à utiliser actuellement avec la CPU-F correspondante et indiquent leur version de firmware.

F_FB_MP

| Version F_FB | S7-300F/400F | S7-1200F | S7-1500F | Remarque |
|--------------|--------------|----------------|----------------|--|
| 1.0 | o | - | - | Version récupérée de la bibliothèque utilisateur d'origine |
| 1.2 | o | - | - | Version récupérée de la bibliothèque utilisateur d'origine |
| 1.3 | x | - | o | Première version intégrée exclusivement dans TIA Portal |
| 1.4 | x | - | x | Comparable à V1.3, pour utilisation dans TIA V14 |
| 2.0 | x | - | x | Type de données des entrées MP_DATA et MP_RNG modifié de "Word" en "Int" pour des raisons de conformité CEI. |
| 3.0 | x | x ¹ | x ² | Comparable à V2.0, compatible avec les nouvelles versions de firmware des automates |

x pris en charge

- non pris en charge

o n'est plus pris en charge

¹ pris en charge pour la version de firmware V4.2 ou supérieure en lien avec la mise à jour TIA Portal V14 Update 2

² pris en charge pour la version de firmware V2.0 ou supérieure

F_FB_RNG_4

| Version F_FB | S7-300F/400F | S7-1200F | S7-1500F | Remarque |
|--------------|--------------|----------------|----------------|--|
| 1.0 | o | - | - | Version récupérée de la bibliothèque utilisateur d'origine |
| 1.2 | o | - | - | Version récupérée de la bibliothèque utilisateur d'origine |
| 1.3 | x | - | o | Première version intégrée exclusivement dans TIA Portal |
| 1.4 | x | - | x | Comparable à V1.3, pour utilisation dans TIA V14 |
| 2.0 | x | - | x | Type de données des entrées MPn_DATA * et MPn_F_KEY * modifié de "Word" en "Int" pour des raisons de conformité CEI. |
| 3.0 | x | x ¹ | x ² | Comparable à V2.0, compatible avec les nouvelles versions de firmware des automates |

x pris en charge

- non pris en charge

o n'est plus pris en charge

* MPn est utilisé pour les pupitres 1 ... 4

¹ pris en charge pour la version de firmware V4.2 ou supérieure en lien avec la mise à jour TIA Portal V14 Update 2

² pris en charge pour la version de firmware V2.0 ou supérieure

F_FB_RNG_16

| Version F_FB | S7-300F/400F | S7-1200F | S7-1500F | Remarque |
|--------------|--------------|----------|----------------|--|
| 1.0 | o | - | - | Version récupérée de la bibliothèque utilisateur d'origine |
| 1.2 | o | - | - | Version récupérée de la bibliothèque utilisateur d'origine |
| 1.3 | x | - | o | Première version intégrée exclusivement dans TIA Portal |
| 1.4 | x | - | x | Comparable à V1.3, pour utilisation dans TIA V14 |
| 2.0 | x | - | x | Type de données des entrées MPn_DATA * et MPn_F_KEY * modifié de "Word" en "Int" pour des raisons de conformité CEI. |
| 3.0 | x | - | x ¹ | Comparable à V2.0, compatible avec les nouvelles versions de firmware des automates |

x pris en charge

- non pris en charge

o n'est plus pris en charge

* MPn est utilisé pour les pupitres 1 ... 16

¹ pris en charge pour la version de firmware V2.0 ou supérieure

Remarque

Mise à niveau des blocs fonctionnels provenant de TIA V13 SP1 et certification

Pendant la mise à niveau vers TIA V14, les blocs fonctionnels sont remplacés par la version F_FB 1.4 qui est comparable à la version précédente. Les versions F_FB V1.4 ont une signature fonctionnelle différente en lien avec S7-1500F. Dans le cadre de la mise à niveau vers TIA V14, vous recevez un protocole de conversion contenant l'affectation des signatures V13 précédentes aux signatures fonctionnelles V14. Grâce à ce protocole, les blocs fonctionnels n'ont pas besoin d'être certifiés à nouveau, malgré le changement de signature. Vous trouverez des informations supplémentaires dans le manuel de programmation et d'utilisation SIMATIC Safety - configuration et programmation, chapitre 1.8.1 "Mise à niveau des projets de STEP 7 Safety V13 SP1 vers V14 sur Internet (<https://support.industry.siemens.com/cs/ww/en/view/54110126>).

Si vous avez besoin de la version F_FB 2.0 ou supérieure, p. ex. pour des raisons de conformité CEI ou de compatibilité avec les version de firmware des automates, vous devez certifier à nouveau les blocs fonctionnels.

Mise à niveau des blocs fonctionnels provenant des versions antérieures de TIA V13 SP1

En suivant la description dans le système d'information TIA, effectuer la migration vers V13 SP1 et suivez ensuite la consigne "Mise à niveau des blocs fonctionnels provenant de TIA V13 SP1 et certification".

Configuration de F-FB <V2.0

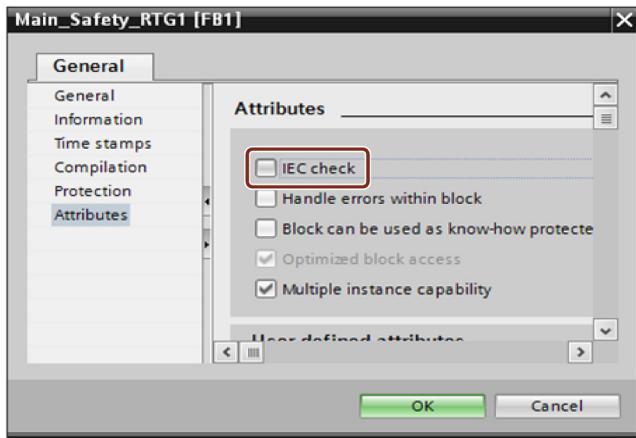
La consigne suivante s'applique si vous utilisez dans la configuration des F-FB avec une version <V2.0.

Remarque

Désactiver le contrôle CEI

Si l'option "Contrôle CEI" est activée dans le bloc fonctionnel "Main-Safety", le projet ne peut pas être compilé.

Désactivez le contrôle CEI dans les propriétés du bloc fonctionnel l'option "Main-Safety", voir figure suivante.



Temps d'exécution des blocs fonctionnels

Les indications relatives aux temps d'exécution se trouvent dans la FAQ 27097159 (<https://support.industry.siemens.com/cs/ww/fr/view/27097159>).

Normes de sécurité et mode de sécurité

Normes relatives à la sûreté de fonctionnement

TÜV

L'homologation TÜV confirme le respect des normes suivantes pour les fonctions de sécurité du pupitre opérateur :

| Norme | Titre | Edition |
|-----------------|---|---------------|
| EN 60204-1 | Sécurité des machines – Équipement électrique des machines – Partie 1 : Exigences générales | 2006 +A1:2009 |
| CEI 62061 | Sécurité des machines – Sécurité fonctionnelle des systèmes de commande électriques, électroniques et programmables de machines | 2005 +A2:2015 |
| CEI 61508-1 à 4 | Niveau d'intégrité de sécurité 3 | 2010 |
| ISO 13850 | Sécurité des machines – Arrêt d'urgence – Principes de conception | 2015 |
| ISO 13849-1 | Performance Level e et catégorie 4 | 2015 |

Caractéristiques techniques du mode de sécurité

- Selon la norme CEI 61508

| | |
|--|------------------------------|
| Architecture matérielle | 1oo2 redondante |
| Mode de demande | high demand mode |
| Probability of a dangerous failure per hour (PFH) | < $1,00 \times 10^{-10}$ 1/h |
| Probability of a dangerous failure on demand (PFD) | < $1,70 \times 10^{-6}$ |
| Classe de sécurité maximale pouvant être atteinte | SIL3 |
| Durée de vie | 10 ans |

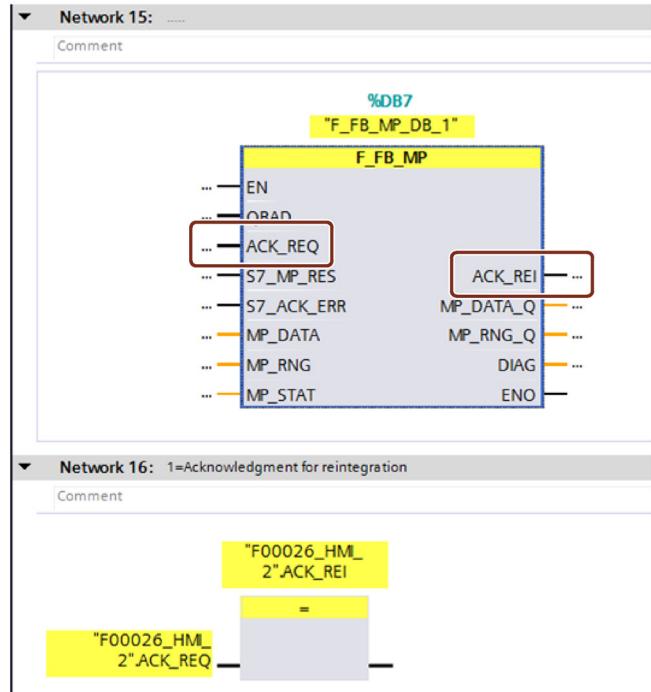
- Selon la norme CEI 13849-1

| | |
|-----------------------------|--------|
| Meantime to Failure (MTTFd) | 89 ans |
| Diagnostic Coverage | High |
| Performance Level | e |
| Catégorie de sécurité | 4 |

Consignes d'utilisation des appareils avec TIA V13 SP1

Communication PROFIsafe

Si après la mise en marche du pupitre opérateur ou après coupure de la liaison PROFIsafe vers une CPU F cette connexion ne s'établit pas automatiquement, il convient d'interconnecter le paramètre de sortie ACK_REI du F_FB_MP comme suit : "ACK_REQ = ACK_REI", voir exemple ci-contre.



Attention, le temps d'exécution du réseau 16 n'est pas compris dans le temps d'exécution des blocs fonctionnels.

Instructions de service espagnoles

Activation de la touche d'arrêt d'urgence

Règle générale : La touche d'arrêt d'urgence est active dès que la communication PROFIsafe est établie et donc indépendamment du fait que le pupitre de sécurité est ou non connecté à une machine.

Dans la traduction espagnole des instructions de service "Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (RFID Tag)", édition 01/2011, il faut lire :

- Chapitre 1.15, page 42, premier point : "El siguiente comportamiento de desconexión de la instalación es válido independientemente de si el panel de operador ha iniciado sesión en una máquina o no."
- Chapitre 2.6, page 52, deuxième phrase : "El pulsador de parada de emergencia es efectivo en una WLAN independientemente de si el panel de operador ha iniciado sesión en una máquina o no."

Paramétrage de la communication WLAN - Accès à distance

Vous pouvez procéder au Web Based Management pour le paramétrage de la communication WLAN directement sur le pupitre opérateur ou via un navigateur Web ou Telnet.

Web Based Management avec un navigateur Web

Vous accédez au Web Based Management avec un navigateur Web standard via le port 34965.
Syntaxe : "http://<adresse IP>:34965"

Exemple : Si l'adresse IP de votre pupitre opérateur est "192.168.1.1", entrez dans la barre d'adresse de votre navigateur Web : "http://192.168.1.1:34965".

Web Based Management via Telnet

Vous pouvez également configurer la configuration WLAN via Telnet. Vous accédez à ce service via le port 34966. Les données d'accès correspondent à celles de l'accès Web.

Normes et homologations

Ce paragraphe contient des informations importantes sur les normes et homologations en vigueur dans différents pays relatives au système radio pour le pupitre opérateur.

Remarque

La vue d'ensemble suivante vous informe sur les homologations possibles.

Les homologations valables pour le pupitre sont uniquement celles indiquées au dos de l'appareil.

Homologation CE



Le pupitre opérateur dans la version mise en circulation par Siemens est conforme aux normes de la directive européenne suivante :

99/5/EG

Directive du Parlement et du Conseil Européen pour l'harmonisation des directives sur les installations radioélectriques et les terminaux de télécommunications des pays membres et la reconnaissance mutuelle de leur conformité.

La conformité aux exigences fondamentales de la directive est assurée par le respect des normes suivantes :

| | |
|----------------------------|---|
| EN 60950 | Sécurité des matériels de traitement de l'information |
| EN 301489-1 | Norme de compatibilité électromagnétique pour les équipements et les services radio |
| EN 301489-17 | Exigences particulières pour les systèmes de transmission de données à large bande et équipements HIPERLAN |
| EN 300328 | Télécommunications, CEM et spectre radioélectrique (ERM) - Systèmes de transmission de données large bande - Equipements de transmission de données fonctionnant dans la bande ISM à 2,4 GHz et utilisant des techniques de modulation à étagement de spectre |
| EN 300440-1 EN 300440-2 | CEM et spectre radioélectrique (ERM) - Appareils à faible portée (SDR) - Equipements radioélectriques utilisés dans les bandes de fréquences 1 à 40 GHz |
| EN 301893 | Réseaux d'accès radio large bande (BRAN) - RLAN à haute performance 5 GHz |
| EN 50371 | Norme générique pour démontrer la conformité des appareils électriques et électroniques de faible puissance aux restrictions de base concernant l'exposition des personnes aux champs électromagnétiques (10 MHz - 300 GHz) |
| 1999/519/CE | Recommandation du Conseil visant à limiter l'exposition de la population aux champs électromagnétiques (0 Hz à 300 GHz) |

Les appareils connectés au système doivent satisfaire aux consignes de sécurité afférentes.

Déclaration de conformité UE

Les déclarations de conformité UE à présenter aux autorités compétentes sont disponibles à l'adresse suivante :

Siemens AG
Digital Factory
Factory Automation
DF FA AS SYS
Postfach 1963
D-92209 Amberg

Cette déclaration atteste la conformité aux directives mentionnées, mais ne tient pas lieu de garantie de propriétés.

Vous trouverez la déclaration de conformité CE sur Internet à l'adresse :

Certificats Mobile Panels 277(F) IWLan (<https://support.industry.siemens.com/cs/ww/fr/ps/14751/cert>)

Homologation UL



Pour Underwriters Laboratories Inc. :

- UL 60950-1 – Information Technology Equipment – Safety
Partie 1 : General Requirements – Edition 2 – Issue Date 2007/03/27
- CSA C22.2 No. 60950-1 (2nd Edition) – Information Technology Equipment – Safety
Partie 1 : General Requirements – Edition 2 – Issue Date 2007/03/27

L'installation n'est conforme à l'homologation qu'en cas de fonctionnement sur accumulateur principal ou stationnaire dans le chargeur.

Approval according to FCC

This device complies with Part 15 of the FCC Rules

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation.

IEEE802.11b or g operation of this product in the USA is firmware-limited to channels 1 through 11.

Notice

Changes or modifications made to this equipment not expressly approved by SIEMENS may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Notice

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Professional Installation Notice:

To comply with FCC Part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

Within the 5.15-5.25 GHz band, this device is only for indoor use operations to reduce any potential for harmful interference to co-channel MSS operations.

RSS-210 of Industry Canada

"Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

"This device has been designed to operate with internal antennas with a maximum gain of 2 dBi and an antenna impedance of 50 Ohms. Other antennas are strictly prohibited for use with this device."

"To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication."

That the device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems."

"Users should also be cautioned to take note that high power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices."

Homologations nationales

Remarque

La vue d'ensemble suivante vous informe sur les homologations radio possibles dans les différents pays.

Les homologations valables pour le pupitre sont uniquement celles indiquées au dos de l'appareil.

| Country | Identification | Approval granted | Country | Identification | Approval granted | Country | Identification | Approval granted |
|----------------------|----------------|------------------|-----------------|----------------|------------------|--------------------------|----------------|------------------|
| Australia | | ✓ | Hong Kong | | | Portugal | | ✓ |
| Austria | | ✓ | Hungary | | ✓ | Romania | | ✓ |
| Bahrain ¹ | | ✓ | Ireland | | ✓ | Russia | | |
| Belgium | | ✓ | Iceland | | ✓ | Singapore | | |
| Bulgaria | | ✓ | Italy | | ✓ | Slovakia | | ✓ |
| Canada | | ✓ | Japan | | ✓ | Slovenia | | ✓ |
| China | | ✓ | Kuwait | | | Spain | | ✓ |
| Cyprus | | ✓ | Latvia | | ✓ | South Africa | | ✓ |
| Czech Republic | | ✓ | Liechtenstein | | ✓ | South Korea | | ✓ |
| Denmark | | ✓ | Lithuania | | ✓ | Sweden | | ✓ |
| Estonia | | ✓ | Luxembourg | | ✓ | Switzerland | | ✓ |
| Finland | | ✓ | Malaysia | | | Taiwan | | ✓ |
| France | | ✓ | Malta | | ✓ | Turkey | | ✓ |
| Germany | | ✓ | The Netherlands | | ✓ | Ukraine | | |
| Great Britain | | ✓ | Norway | | ✓ | United States of America | | ✓ |
| Greece | | ✓ | Poland | | ✓ | | | |

¹ Pour utiliser l'appareil au Bahreïn, vous devez vous enregistrer à l'adresse suivante :

TRA Bahrain (<http://www.tra.org.bh/en/index>)

Siemens AG
Division Digital Factory
Postfach 48 48
90026 NÜRNBERG
ALLEMAGNE

Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (étiquette RFID)
A5E03357930-AH, 03/2017

SIEMENS

SIMATIC HMI

Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (tag RFID)

Informazioni sul prodotto



A5E03357930

Le presenti informazioni sul prodotto contengono avvertenze importanti. Tali avvertenze sono parte integrante delle istruzioni operative del pannello operatore e sono da considerarsi prioritarie rispetto a quanto affermato nelle Istruzioni operative, nelle Release Notes e nella Guida in linea.

Validità

Le presenti informazioni sul prodotto sono applicabili ai seguenti pannelli operatore:

- Mobile Panel 277 IWLAN V2

N. di articolo:

- 6AV6 645-0DD01-0AX1
- 6AV6 645-0DD02-0AX1
- 6AV6 645-0DE01-0AX1
- 6AV6 645-0DE02-0AX1
- 6AV6 645-0FD01-0AX1
- 6AV6 645-0FE01-0AX1



- Mobile Panel 277F IWLAN V2

N. di articolo:

- 6AV6 645-0EB01-0AX1
- 6AV6 645-0EB02-0AX1
- 6AV6 645-0EC01-0AX1
- 6AV6 645-0EC02-0AX1
- 6AV6 645-0GB01-0AX1
- 6AV6 645-0GC01-0AX1



- Mobile Panel 277F IWLAN V2 RFID

N. di articolo:

- 6AV6 645-0EF01-0AX1
- 6AV6 645-0EF02-0AX1
- 6AV6 645-0GF01-0AX1



In particolare è importante tener conto delle omologazioni e dei certificati.

Nota

Per un dato pannello operatore sono valide solo le omologazioni indicate sul retro dell'apparecchiatura.

Avvertenze di sicurezza per Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2 e Mobile Panel 277F IWLAN (tag RFID)

Progettazione

Nota

Utilizzo del software WinCC flexible adeguato

Per la progettazione del pannello operatore utilizzare esclusivamente uno dei seguenti pacchetti software:

- "WinCC flexible 2008 SP2" con "HSP Mobile Panel 277 Wireless V2"
- Una versione di WinCC (TIA Portal) abilitata per i pannelli operatore

File GSDML di migrazione per controllori sprovvisti di diagnostica PROFINET avanzata

Il pannello operatore supporta la diagnostica PROFINET avanzata e può essere impiegato esclusivamente su un PROFINET IO Controller che supporti a sua volta questa diagnostica specifica.

L'utilizzo del pannello operatore su un PROFINET IO Controller che non supporta la diagnostica PROFINET avanzata richiede un file GSDML di migrazione.

Questo file per il pannello operatore è disponibile in Internet, unitamente ad una descrizione dell'installazione, al sito:

File GSDML di migrazione sul Mobile Panel 277(F) IWLAN V2/(tag RFID)

(<http://support.automation.siemens.com/WW/view/it/19241467>)

Comunicazione LAN e WLAN

Nota

Comunicazione con diversi access point possibile esclusivamente con iPCF-MC

In assenza di iPCF-MC, la comunicazione con più di un access point per la copertura di un campo WLAN di una certa estensione, non è possibile senza interruzioni.

Si raccomanda pertanto l'impiego di iPCF-MC nella comunicazione con più di un access point per la copertura di un campo WLAN di grandi dimensioni.

Utilizzare esclusivamente WPA2 con AES

Per proteggere nel modo più efficiente possibile la comunicazione WLAN utilizzare esclusivamente WPA2 con AES. Grazie alla selezione di password e chiavi adatte, sufficientemente lunghe e non intuibili, questo procedimento è considerato sicuro secondo lo stato attuale della tecnica.

Rete di dati esente da disturbi

Il funzionamento sicuro del pannello operatore può essere garantito soltanto in una rete di dati esente da disturbi. I disturbi esterni che hanno effetto sulla rete radiofonica possono ad es. determinare un sovraccarico del pannello operatore.

Nella comunicazione wireless basata su Ethernet, ad es. PROFINET IO, HTTP, Sm@rtAccess, Sm@rtService e OPC, l'utente finale è responsabile della sicurezza della rete di dati.

La funzione "Storm Threshold" nell'Access Point SCALANCE di Siemens deve essere attivata. Questa attivazione è necessaria affinché l'impianto funzioni in modo stabile anche in caso di un elevato carico della rete. Per i telegrammi broadcast devono essere effettuate le seguenti impostazioni:

- Address Threshold: 255
- Wireless: 255

Indirizzi IP nella rete di dati

L'area di indirizzi compresa tra 169.254.2.252 e 169.254.2.255 è occupata internamente dal pannello operatore e non deve essere in alcun caso contenuta nella rete di dati configurata.

Per non compromettere la comunicazione interna del pannello, non utilizzare indirizzi dell'area "link-local" (169.254.*.*).

ATTENZIONE

Potenza di trasmissione massima consentita

Osservare la potenza di trasmissione IWLAN massima consentita nel Paese in cui viene impiegato il pannello operatore:

- USA: -14 dBm
- Paesi nell'area UE: -11 dBm
- Tutti gli altri Paesi: -17 dBm

Per l'impostazione della potenza di trasmissione nel pannello operatore procedere nel modo seguente:

1. Aprire il tool "WLAN V2 Config" sul desktop del pannello operatore.



2. Selezionare "Interfaces > WLAN > Advanced".
3. Impostare il valore "Transmit Power" sulla potenza di trasmissione massima ammessa per il proprio Paese.

Temperatura ambiente

Il pannello operatore è adatto al funzionamento con temperatura ambiente di 0 °C ... 40 °C.

Nota

Carica dell'accumulatore principale nel pannello operatore

Se il pannello operatore è attivato e appeso nella stazione di carica vale quanto segue: Il caricamento dell'accumulatore principale nel pannello operatore viene mantenuto fino a una temperatura ambiente di 40°C.

Carica dell'accumulatore negli appositi vani della stazione di carica

Il caricamento dell'accumulatore a diverse temperature ambiente viene descritto nelle informazioni sul prodotto allegata alla stazione di carica.

Specifiche dell'interfaccia USB

Nota

L'interfaccia USB deve essere utilizzata esclusivamente per la messa in servizio e a scopo di manutenzione.

La lunghezza dei conduttori dei pannelli operatore USB collegati non deve superare i 3 m.

PROFINET IO

Nota

Per migliorare la sicurezza dell'applicazione, interrogare il bit di attività nell'applicazione della CPU. Un valore invariato del bit di attività indica l'interruzione della comunicazione PROFINET IO. Controllare che tutti i nodi PROFINET IO siano attivati e che funzionino correttamente.

Stazione di carica

La stazione di carica corrisponde al grado di protezione III secondo EN 61131-2:2007 e EN 60950-1:2006.

Avvertenze per il Giappone

Nota

Nessun collegamento ad access point nei canali da 184 a 192

In caso di impiego del Mobile Panel 277F IWLAN in una banda di 5 GHz e, per il collegamento WLAN ad access point, di uno dei canali da 184 a 192, può accadere che il collegamento ad access point non sia possibile.

Non utilizzare i canali WLAN compresi tra 184 e 192, vedere le istruzioni operative, capitolo "Parametrizzazione del collegamento WLAN".

Notes for use in Korea

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

This equipment is Industrial (Class A) electromagnetic wave suitability equipment and seller or user should take notice of it, and this equipment is to be used in the places except for home.

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

This device shall not be used for life-safety related service due to radio interference possibility.

Industrial Security

Siemens commercializza prodotti e soluzioni dotati di funzioni Industrial Security che contribuiscono al funzionamento sicuro di impianti, soluzioni, macchine e reti.

La protezione di impianti, sistemi, macchine e reti da minacce cibernetiche, richiede l'implementazione e la gestione continua di un concetto globale di Industrial Security che corrisponda allo stato attuale della tecnica. I prodotti e le soluzioni Siemens costituiscono soltanto una componente imprescindibile di questo concetto.

E' responsabilità del cliente prevenire accessi non autorizzati ad impianti, sistemi, macchine e reti. Il collegamento di sistemi, macchine e componenti, se necessario, deve avvenire esclusivamente nell'ambito della rete aziendale o tramite Internet previa adozione di opportune misure (ad es. impiego di firewall e segmentazione della rete).

Attenersi inoltre alle raccomandazioni Siemens concernenti misure di sicurezza adeguate. Ulteriori informazioni su Industrial Security sono disponibili al sito (<http://www.siemens.com/industrialsecurity>).

I prodotti e le soluzioni Siemens vengono costantemente perfezionati per incrementarne la sicurezza. Siemens raccomanda esplicitamente di eseguire gli aggiornamenti non appena sono disponibili i relativi update e di impiegare sempre le versioni aggiornate dei prodotti. L'uso di prodotti non più attuali o di versioni non più supportate incrementa il rischio di attacchi cibernetici.

Per essere costantemente aggiornati sugli update dei prodotti, abbonarsi a Siemens Industrial Security RSS Feed al sito (<http://www.siemens.com/industrialsecurity>).

Esclusione della responsabilità nell'ambito di aggiornamenti di software di terzi

Questo prodotto contiene software di terzi. Siemens AG si assume la responsabilità per gli update/i patch dei software di terzi solo nel caso in cui questi siano stati distribuiti nel quadro di un contratto di assistenza Siemens per l'aggiornamento di software o siano stati rilasciati ufficialmente da Siemens AG. In caso contrario gli update/i patch sono effettuati sotto la responsabilità dell'utente. Ulteriori informazioni sul servizio aggiornamento software sono disponibili in Internet alla sezione Software Update Service

(<http://www.automation.siemens.com/mcms/automation-software/en/software-update-service>).

Avvertenze sulla protezione degli account amministratore

Un utente con diritti di amministratore ha a disposizione sul sistema ampie possibilità di accesso e manipolazione.

Pertanto è necessario proteggere adeguatamente gli account amministratore per evitare modifiche non autorizzate. A tale scopo, utilizzare password sicure e servirsi di un account utente standard per le operazioni normali. A seconda delle necessità vanno impiegate ulteriori misure, quali ad es. l'applicazione di direttive di sicurezza.

Avvertenze di sicurezza valide per Mobile Panel 277F IWLAN V2 e Mobile Panel 277F IWLAN (tag RFID)

Progettazione in STEP 7

| |
|--|
|  AVVERTENZA |
| Valutazione ritardata del tasto di ARRESTO D'EMERGENZA |
| Se il tempo di ciclo per l'OB35 è impostato su un valore minore del tempo di aggiornamento PNIO, possono verificarsi guasti del telegramma e una valutazione ritardata dell'uscita E-STOP di F_FB_RNG_n. |
| Impostare per il tempo di ciclo dell'OB35 un valore maggiore del tempo di aggiornamento PNIO. |

PROFINET IO

Nota

Rimedi in presenza di un blocco sporadico del display e del touchscreen

Raramente può accadere che il display o il touchscreen del pannello operatore si blocchino impedendo l'uso del dispositivo. A prescindere da quest'inconveniente, la comunicazione tramite l'interfaccia PROFINET, ad es. la comunicazione PROFIsafe, si svolge senza interruzioni sullo sfondo.

Rimedio:

1. Portare allo stato sicuro allo stato sicuro la macchina alla quale è collegato il pannello operatore.
2. Riavviare il pannello operatore. Per quest'operazione, estrarre l'accumulatore principale dal relativo vano, quindi premere il tasto del reset (vedere anche l'istruzione operativa).

Indirizzo PROFIsafe del pannello operatore nel collegamento con il TIA Portal

Nota

Indirizzo PROFIsafe "65535"

Nel collegamento con il TIA Portal, l'acquisizione automatica dal progetto dell'indirizzo PROFIsafe inserendo il valore dell'indirizzo "65535", non viene supportata nel pannello operatore.

Comunicazione

Blocchi funzionali e controllori

Le tabelle seguenti mostrano le versioni _FB attualmente utilizzabili per le varie CPU F e le relative versioni del firmware.

F_FB_MP

| Versione F_FB | S7-300F/400F | S7-1200F | S7-1500F | Osservazioni |
|---------------|--------------|----------------|----------------|---|
| 1.0 | o | - | - | Versione acquisita dalla biblioteca utenti originaria |
| 1.2 | o | - | - | Versione acquisita dalla biblioteca utenti originaria |
| 1.3 | x | - | o | Prima versione integrata esclusivamente nel TIA Portal |
| 1.4 | x | - | x | Equivalenti alla V1.3, per l'impiego in TIA V14 |
| 2.0 | x | - | x | Tipi di dati degli ingressi MP_DATA e MP_RNG modificati da "Word" a "Int" in ragione della conformità IEC |
| 3.0 | x | x ¹ | x ² | Equivalenti alla versione V2.0, compatibile con le nuove versioni firmware dei controllori |

x supportata

- non supportata

o non più supportata

¹ supportata con la versione firmware V4.2 o superiore con il TIA Portal V14 Update 2

² supportata con la versione firmware V2.0 o superiore

F_FBG_RNG_4

| Versione F_FBG | S7-300F/400F | S7-1200F | S7-1500F | Osservazioni |
|----------------|--------------|----------------|----------------|---|
| 1.0 | o | - | - | Versione acquisita dalla biblioteca utenti originaria |
| 1.2 | o | - | - | Versione acquisita dalla biblioteca utenti originaria |
| 1.3 | x | - | o | Prima versione integrata esclusivamente nel TIA Portal |
| 1.4 | x | - | x | Equivalenti alla V1.3, per l'impiego in TIA V14 |
| 2.0 | x | - | x | Tipi di dati degli ingressi MPn_DATA * e MPn_F_KEY * modificati da "Word" a "Int" in ragione della conformità IEC |
| 3.0 | x | x ¹ | x ² | Equivalenti alla versione V2.0, compatibile con le nuove versioni firmware dei controllori |

x supportata

- non supportata

o non più supportata

* MPn trova impiego nel pannello operatore 1 ... 4

¹ supportata con la versione firmware V4.2 o superiore con il TIA Portal V14 Update 2

² supportata con la versione firmware V2.0 o superiore

F_FBG_RNG_16

| Versione F_FBG | S7-300F/400F | S7-1200F | S7-1500F | Osservazioni |
|----------------|--------------|----------|----------------|---|
| 1.0 | o | - | - | Versione acquisita dalla biblioteca utenti originaria |
| 1.2 | o | - | - | Versione acquisita dalla biblioteca utenti originaria |
| 1.3 | x | - | o | Prima versione integrata esclusivamente nel TIA Portal |
| 1.4 | x | - | x | Equivalenti alla V1.3, per l'impiego in TIA V14 |
| 2.0 | x | - | x | Tipi di dati degli ingressi MPn_DATA * e MPn_F_KEY * modificati da "Word" a "Int" in ragione della conformità IEC |
| 3.0 | x | - | x ¹ | Equivalenti alla versione V2.0, compatibile con le nuove versioni firmware dei controllori |

x supportata

- non supportata

o non più supportata

* MPn trova impiego nel pannello operatore 1 ... 16

¹ supportata con la versione firmware V2.0 o superiore

Nota

Aggiornamento dei blocchi funzionali di TIA V13 SP1 e certificazione

Durante l'aggiornamento a TIA V14, i blocchi funzionali interessati vengono sostituiti dalla versione V.1.4 F_FBG che presenta la stessa valenza della versione precedente. Impiegate nell'S7-1500F, le versioni V1.4 F_FBG presentano una firma funzionale modificata. Con l'aggiornamento a TIA V14 viene fornito un protocollo di conversione indicante l'assegnazione delle precedenti firme V13 alle firme funzionali V14 attuali. Questo protocollo di conversione rende superflua una nuova certificazione dei blocchi funzionali nonostante le modifiche intervenute nelle firme. Per ulteriori informazioni consultare il manuale di programmazione e di servizio "SIMATIC Safety - Configuring and Programming", capitolo 1.8.1 "Upgrading projects from STEP 7 Safety V13 SP1 to V14 disponibile" in Internet (<https://support.industry.siemens.com/cs/ww/en/view/54110126>).

Qualora si necessiti della versione V 2.0 F_FBG o superiore, ad es. per la conformità IEC o la compatibilità dei controllori a versioni firmware superiori, i blocchi funzionali devono essere nuovamente certificati.

Aggiornamento dei blocchi funzionali di versioni precedenti di TIA V13 SP1.

Seguendo la descrizione fornita nel sistema informativo TIA, eseguire la migrazione a V13 SP1 e attenersi all'Avvertenza "Aggiornamento dei blocchi funzionali di TIA V13 SP1 e certificazione".

Progettazione di FB F <V2.0

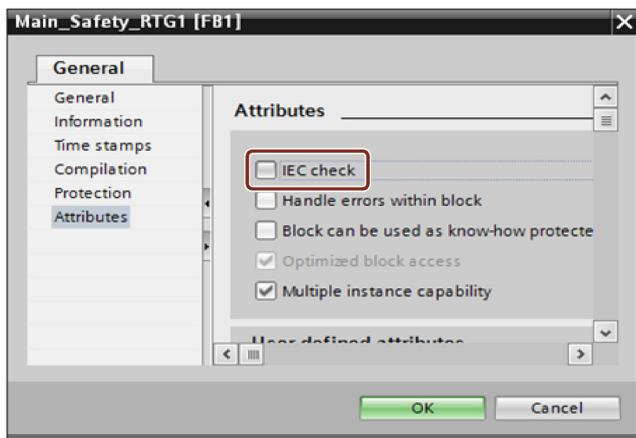
La seguente avvertenza ha validità in caso di impiego nella progettazione di FB F con una versione <V2.0.

Nota

Disattivare il controllo IEC

Se nel blocco funzionale "Main-Safety" è attivata l'opzione "Controllo IEC", la compilazione del progetto non è possibile.

Nelle proprietà del blocco funzionale "Main-Safety", disattivare l'opzione "Controllo IEC", vedere la figura seguente.



Orari di esecuzione dei blocchi funzionali

Per indicazioni sugli orari di esecuzione dei blocchi funzionali consultare le FAQ 27097159 (<https://support.industry.siemens.com/cs/ww/it/view/27097159>).

Norme di sicurezza e funzionamento fail-safe

Norme sulla sicurezza di funzionamento:

TÜV

Il TÜV conferma la conformità delle funzioni fail safe del pannello operatore alle seguenti norme:

| Norma | Titolo | Edizione |
|-------------------|--|---------------|
| DIN EN 60204-1 | Sicurezza delle macchine – dotazione elettrica delle macchine – Parte 1: Requisiti generali | 2006 +A1:2009 |
| DIN IEC 62061 | Sicurezza delle macchine - Sicurezza funzionale di sistemi di controllo elettrici ed elettronici nonché di controllori programmabili di macchine | 2005 +A2:2015 |
| IEC 61508-1 ... 4 | Livello di integrità di sicurezza 3 | 2010 |
| ISO 13850 | Sicurezza delle macchine - Funzione di ARRESTO DI EMERGENZA - Principi di progettazione | 2015 |
| ISO 13849-1 | Performance Level e e Categoria 4 | 2015 |

Dati tecnici sul funzionamento fail safe

- A norma IEC 61508

| | |
|--|------------------------------|
| Architettura hardware | Ridondanza 1oo2 |
| Percentuale di sicurezza | high demand mode |
| Probability of a dangerous failure per hour (PFH) | < $1,00 \times 10^{-10}$ 1/h |
| Probability of a dangerous failure on demand (PFD) | < $1,70 \times 10^{-6}$ |
| Max. classe di sicurezza raggiungibile | SIL3 |
| Durata | 10 anni |

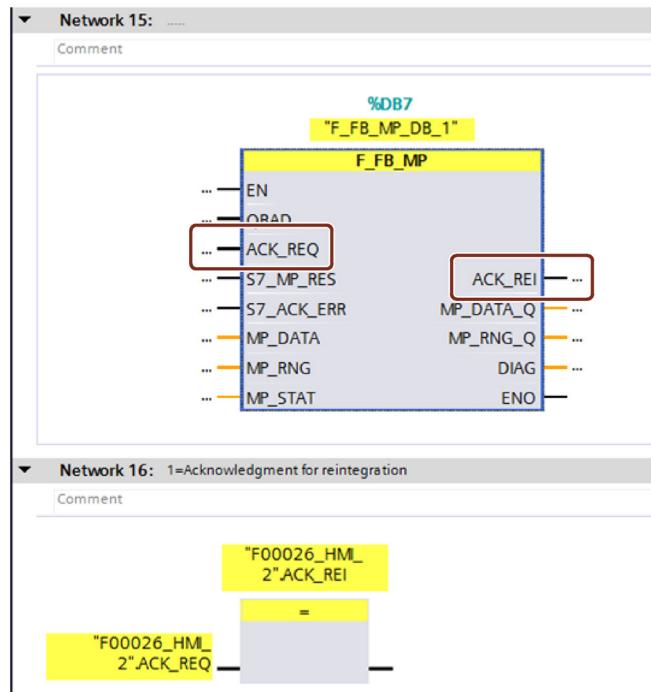
- Secondo IEC 13849-1

| | |
|-----------------------------|----------|
| Meantime to Failure (MTTFd) | 89 years |
| Diagnostic Coverage | High |
| Performance Level | e |
| Categoria di sicurezza | 4 |

Indicazioni per l'utilizzo dei pannelli operatore TIA V13 SP1

Comunicazione PROFIsafe

Qualora dopo l'inserzione del pannello operatore, oppure in seguito all'interruzione del collegamento PROFIsafe con una CPU F, il collegamento in oggetto non si ripristini da sé, il parametro di uscita ACK_REI in F_FB_MP deve essere interconnesso come indicato nel seguente: "ACK_REQ = ACK_REQ", vedere l'esempio seguente.



Tenere presente che il tempo di esecuzione del segmento 16 non è compreso nel tempo di esecuzione dei blocchi funzionali.

Istruzioni operative in lingua spagnola

Attivazione dell'interruttore di ARRESTO di EMERGENZA

Regola generale: Il tasto di ARRESTO DI EMERGENZA è attivo non appena viene creata la comunicazione PROFIsafe, a prescindere dal fatto che il pannello operatore fail safe sia o meno registrato su una macchina.

La traduzione in lingua spagnola delle istruzioni operative "Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (RFID Tag)", Edizione 01/2011, deve contenere ad es. le seguenti informazioni:

- Capitolo 1.15, Pagina 42, primo capoverso dell'elenco: "El siguiente comportamiento de desconexión de la instalación es válido independientemente de si el panel de operador ha iniciado sesión en una máquina o no."
- Capitolo 2.6, Pagina 52, seconda frase: "El pulsador de parada de emergencia es efectivo en una WLAN independientemente de si el panel de operador ha iniciado sesión en una máquina o no."

Parametrizzazione della comunicazione WLAN - Accesso remoto

Per la parametrizzazione della comunicazione WLAN è possibile eseguire il Web Based Management direttamente sul pannello operatore o, in alternativa, tramite un browser di rete o Telnet.

Web Based Management tramite browser di rete

L'accesso al Web Based Management avviene tramite un browser di rete standard attraverso la porta 34965. Sintassi: "http://<indirizzo IP>:34965"

Esempio: Se l'indirizzo IP del proprio pannello operatore è "192.168.1.1", nella barra degli indirizzi del browser di rete va inserito: "http://192.168.1.1:34965".

Web Based Management tramite Telnet

La comunicazione WLAN può essere configurata anche tramite Telnet. Questo servizio è disponibile attraverso la porta 34966. I dati di accesso corrispondono a quelli per l'accesso al Web.

Norme e omologazioni

Il presente paragrafo contiene informazioni importanti su Norme e omologazioni del pannello operatore nei vari Paesi relative al sistema radio.

Nota

Il seguente elenco riporta le omologazioni possibili.

Per un dato pannello operatore sono valide solo le omologazioni indicate sul retro dell'apparecchiatura.

Omologazione CE



Il pannello operatore, nella versione commercializzata da Siemens è conforme alle disposizioni previste dalle seguenti Direttive Europee:

99/5/CE

Direttiva del Parlamento europeo e del Consiglio riguardante le apparecchiature radio e le apparecchiature terminali di telecomunicazione e il reciproco riconoscimento della loro conformità.

La conformità ai requisiti fondamentali della direttiva è assicurata dal rispetto delle seguenti norme:

| | |
|----------------------------|---|
| EN 60950 | Apparecchiature per la tecnologia dell'informazione - Sicurezza |
| EN 301489-1 | Compatibilità elettromagnetica per dispositivi radio e relativi servizi |
| EN 301489-17 | Condizioni specifiche per sistemi di trasmissione dati a banda larga e per dispositivi in reti radio locali di grande potenza (HIPERLAN) |
| EN 300328 | Compatibilità elettromagnetica e questioni relative allo spettro delle radiofrequenze (ERM) - Sistemi di trasmissione a banda larga - Apparecchiature di trasmissione dati che operano nella banda da 2,4 GHz ISM e che utilizzano tecniche di modulazione ad ampio spettro |
| EN 300440-1 EN 300440-2 | Compatibilità elettromagnetica e questioni relative allo spettro delle radiofrequenze (ERM) - Dispositivi a breve portata - Apparecchiature radio da utilizzare nella gamma di frequenza da 1 GHz a 40 GHz |
| EN 301893 | Reti di accesso radio a banda larga (BRAN) - 5GHz RLAN ad alte prestazioni |
| EN 50371 | Conformità degli apparecchi elettronici ed elettrici di bassa potenza ai limiti di base fissati per la sicurezza delle persone esposte a campi elettromagnetici (10 MHz - 300 GHz) |
| 1999/519/CE | Raccomandazione del Consiglio per la limitazione dell'esposizione della popolazione ai campi elettromagnetici (0 Hz - 300 GHz) |

I dispositivi collegati al sistema devono soddisfare le disposizioni di sicurezza rilevanti.

Dichiarazione di conformità CE

Le dichiarazioni di conformità CE sono a disposizione delle autorità competenti presso:

Siemens AG
Digital Factory
Factory Automation
DF FA AS SYS
Postfach 1963
D-92209 Amberg

Questa dichiarazione certifica la conformità alle direttive indicate ma non costituisce una garanzia rispetto alle caratteristiche.

La dichiarazione di conformità CE può essere scaricata all'indirizzo Internet:

Certificati Mobile Panel 277(F) IWLAN (<https://support.industry.siemens.com/cs/ww/it/ps/14751/cert>)

Omologazione UL



Underwriters Laboratories Inc. corrispondente a:

- UL 60950-1 – Information Technology Equipment – Safety
Parte 1: General Requirements – Edition 2 – Issue Date 2007/03/27
- CSA C22.2 No. 60950-1 (2nd Edition) – Information Technology Equipment – Safety
Parte 1: General Requirements – Edition 2 – Issue Date 2007/03/27

I requisiti di omologazione vengono soddisfatti esclusivamente nei casi di funzionamento con accumulatore principale o di funzionamento stazionario nella stazione di carica.

Approval according to FCC

This device complies with Part 15 of the FCC Rules

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation.

IEEE802.11b or g operation of this product in the USA is firmware-limited to channels 1 through 11.

Notice

Changes or modifications made to this equipment not expressly approved by SIEMENS may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Notice

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Professional Installation Notice:

To comply with FCC Part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

Within the 5.15-5.25 GHz band, this device is only for indoor use operations to reduce any potential for harmful interference to co-channel MSS operations.

RSS-210 of Industry Canada

"Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

"This device has been designed to operate with internal antennas with a maximum gain of 2 dBi and an antenna impedance of 50 Ohms. Other antennas are strictly prohibited for use with this device."

"To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication."

That the device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems."

"Users should also be cautioned to take note that high power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices."

Omologazioni nazionali

Nota

Il seguente elenco riporta le omologazioni radio in vigore nei diversi paesi.

Per un dato pannello operatore sono valide solo le omologazioni indicate sul retro dell'apparecchiatura.

| Country | Identification | Approval granted | Country | Identification | Approval granted | Country | Identification | Approval granted |
|----------------------|----------------|------------------|-----------------|----------------|------------------|--------------------------|----------------|------------------|
| Australia | | ✓ | Hong Kong | | | Portugal | | ✓ |
| Austria | | ✓ | Hungary | | ✓ | Romania | | ✓ |
| Bahrain ¹ | | ✓ | Ireland | | ✓ | Russia | | |
| Belgium | | ✓ | Iceland | | ✓ | Singapore | | |
| Bulgaria | | ✓ | Italy | | ✓ | Slovakia | | ✓ |
| Canada | | ✓ | Japan | | ✓ | Slovenia | | ✓ |
| China | 電訊管理局 | ✓ | Kuwait | | | Spain | | ✓ |
| Cyprus | | ✓ | Latvia | | ✓ | South Africa | | ✓ |
| Czech Republic | | ✓ | Liechtenstein | | ✓ | South Korea | | ✓ |
| Denmark | | ✓ | Lithuania | | ✓ | Sweden | | ✓ |
| Estonia | | ✓ | Luxembourg | | ✓ | Switzerland | | ✓ |
| Finland | | ✓ | Malaysia | | | Taiwan | | ✓ |
| France | | ✓ | Malta | | ✓ | Turkey | | ✓ |
| Germany | | ✓ | The Netherlands | | ✓ | Ukraine | | |
| Great Britain | | ✓ | Norway | | ✓ | United States of America | | ✓ |
| Greece | | ✓ | Poland | | ✓ | | | |

¹ Per utilizzare il pannello operatore nel Bahrain è necessario registrarsi al seguente indirizzo:

TRA Bahrain (<http://www.tra.org.bh/en/index>)

Siemens AG
Division Digital Factory
Postfach 48 48
90026 NÜRNBERG
GERMANIA

Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (tag RFID)
A5E03357930-AH, 03/2017

Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (tag RFID)

Información del producto



A5E03357930

La presente información de producto contiene indicaciones importantes. Las presentes indicaciones complementan las instrucciones de servicio del panel de operador y prevalecen sobre lo mencionado en las instrucciones de servicio, en las Release Notes y en la Ayuda en pantalla.

Validez

La presente información de producto vale para los siguientes paneles de operador:

- Mobile Panel 277 IWLAN V2

Referencias:

- 6AV6 645-0DD01-0AX1
- 6AV6 645-0DD02-0AX1
- 6AV6 645-0DE01-0AX1
- 6AV6 645-0DE02-0AX1
- 6AV6 645-0FD01-0AX1
- 6AV6 645-0FE01-0AX1



- Mobile Panel 277F IWLAN V2

Referencias:

- 6AV6 645-0EB01-0AX1
- 6AV6 645-0EB02-0AX1
- 6AV6 645-0EC01-0AX1
- 6AV6 645-0EC02-0AX1
- 6AV6 645-0GB01-0AX1
- 6AV6 645-0GC01-0AX1



- Mobile Panel 277F IWLAN V2 RFID

Referencias:

- 6AV6 645-0EF01-0AX1
- 6AV6 645-0EF02-0AX1
- 6AV6 645-0GF01-0AX1



Observe especialmente las homologaciones y certificados.

Nota

Para el panel de operador son aplicables únicamente las homologaciones indicadas en el lado posterior del equipo.

Consignas de seguridad para Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2 y Mobile Panel 277F IWLAN (tag RFID)

Configuración

Nota

Se requiere el software WinCC flexible apropiado

Para configurar el panel de operador, utilice uno de los paquetes de software siguientes:

- "WinCC flexible 2008 SP2" con "HSP Mobile Panel 277 Wireless V2"
- Una versión WinCC (TIA Portal) autorizada para los paneles de operador

Archivo de migración GSDML para controladores sin diagnóstico PROFINET avanzado

El panel de operador soporta el diagnóstico PROFINET avanzado y solo puede utilizarse en un controlador PROFINET IO que también soporte dicho diagnóstico.

Para utilizar el panel de operador en un controlador PROFINET IO que no soporte el diagnóstico PROFINET avanzado, se requiere un archivo de migración GSDML.

Encontrará el archivo de migración GSDML para el panel de operador junto con una descripción de la instalación en la dirección de Internet:

Archivo de migración GSDML Mobile Panel 277(F) IWLAN V2/(tag RFID)
(<http://support.automation.siemens.com/WW/view/es/19241467>)

Comunicación LAN y WLAN

Nota

Possibilidad de comunicación con varios Access Points solo con iPCF-MC

Sin iPCF-MC, la comunicación con más de un Access Point para cubrir una zona de WLAN más amplia no es posible sin interrupciones.

Utilice iPCF-MC para la comunicación con varios Access Points para cubrir una zona de WLAN más amplia.

Utilice solo WPA2 con AES

Para asegurar la comunicación WLAN de la mejor forma posible, utilice solo WPA2 con AES. Si se seleccionan contraseñas y claves adecuadas que sean lo suficientemente largas y no puedan adivinarse, este procedimiento se considera seguro conforme al estado actual de la técnica.

Necesidad de una red de datos sin perturbaciones

El funcionamiento seguro del panel de operador sólo está garantizado en una red de datos sin perturbaciones. Las interferencias externas sobre la red inalámbrica podrían p. ej. sobrecargar el panel de operador.

En la comunicación inalámbrica basada en Ethernet, p. ej. PROFINET IO, HTTP, Sm@rtAccess, Sm@rtService y OPC, el usuario final es responsable de la seguridad de la red de datos.

La función "Storm Threshold" tiene que estar activada en el Siemens Access Point SCALANCE. Esta activación es necesaria para el funcionamiento estable de la instalación, incluso a una carga de red elevada. Ajuste lo siguiente para los telegramas broadcast:

- Address Threshold: 255
- Wireless: 255.

Direcciones IP en la red de datos

El área de direcciones 169.254.2.252 hasta 169.254.2.255 está ocupada internamente por el dispositivo y no puede estar incluida en ningún caso en la red de datos configurada.

Para no mermar la comunicación interna del dispositivo, no utilice direcciones del área "link-local" (169.254.*.*).

ATENCIÓN

Potencia de transmisión máxima permitida

Tenga en cuenta que es necesario respetar la potencia de transmisión máxima permitida para la IWLan en el país en el que se utilice el panel de operador:

- EE.UU.: -14 dBm
- Países de la UE: -11 dBm
- Todos los demás países: -17 dBm

Para ajustar la potencia de transmisión del panel de operador, proceda del siguiente modo:

1. Abra la herramienta "WLAN V2 Config" desde el escritorio del panel de operador.



2. Seleccione "Interfaces > WLAN > Advanced".
3. Ajuste el valor "Transmit Power" a la potencia de transmisión permitida en el país de utilización.

Temperatura ambiente

El panel de operador está diseñado para utilizarse a una temperatura ambiente de entre 0 °C y 40 °C.

Nota

Cargar la batería principal en el panel de operador

Si el panel de operador está encendido y colgado en la estación de carga, rige lo siguiente: La carga de la batería principal en el panel de operador se mantiene hasta una temperatura ambiente de 40 °C.

Cargar las baterías en los compartimentos de carga de la estación

Encontrará información relacionada con la carga de las baterías a diferentes temperaturas ambiente en la información del producto adjunta a la estación de carga.

Especificación del puerto USB

Nota

El puerto USB debe utilizarse exclusivamente para la puesta en servicio y para fines de mantenimiento.
La longitud de cable de los dispositivos USB conectados no debe ser superior a 3 m.

PROFINET IO

Nota

Para mejorar la seguridad de su aplicación, consulte el bit de señal de vida en la aplicación de la CPU. Cuando el valor del bit de señal de vida no cambia, la comunicación PROFINET IO está interrumpida. Compruebe si todos los dispositivos PROFINET IO están conectados y funcionan correctamente.

Estación de carga

La estación de carga cumple la clase de protección III según EN 61131-2:2007 y EN 60950-1:2006.

Indicaciones para Japón

Nota

No hay conexión con el Access Point en los canales 184 a 192

Si se utiliza el Mobile Panel 277F IWLAN en la banda de 5 GHz y se emplea uno de los canales del 184 al 192 para la conexión WLAN con el Access Point, es posible que no pueda establecerse ninguna conexión con el Access Point.

No utilice los canales WLAN del 184 al 192; consulte las instrucciones de servicio, capítulo "Parametrizar conexión WLAN".

Notes for use in Korea

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

This equipment is Industrial (Class A) electromagnetic wave suitability equipment and seller or user should take notice of it, and this equipment is to be used in the places except for home.

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

This device shall not be used for life-safety related service due to radio interference possibility.

Industrial Security

Siemens ofrece productos y soluciones con funciones de seguridad industrial con el objetivo de hacer más seguro el funcionamiento de instalaciones, sistemas, máquinas y redes.

Para proteger las instalaciones, los sistemas, las máquinas y las redes de amenazas cibernéticas, es necesario implementar (y mantener continuamente) un concepto de seguridad industrial integral que sea conforme a la tecnología más avanzada. Los productos y las soluciones de Siemens constituyen únicamente una parte de este concepto.

El cliente es responsable de impedir el acceso no autorizado a sus instalaciones, sistemas, máquinas y redes. Los sistemas, las máquinas y los componentes solo deben estar conectados a la red corporativa o a Internet cuando y en la medida que sea necesario y siempre que se hayan tomado las medidas de protección adecuadas (p. ej., uso de cortafuegos y segmentación de la red).

Adicionalmente, deberán observarse las recomendaciones de Siemens en cuanto a las medidas de protección correspondientes. Encontrará más información sobre seguridad industrial en (<http://www.siemens.com/industrialsecurity>).

Los productos y las soluciones de Siemens están sometidos a un desarrollo constante con el fin de mejorar todavía más su seguridad. Siemens recomienda expresamente realizar actualizaciones en cuanto estén disponibles y utilizar únicamente las últimas versiones de los productos. El uso de versiones anteriores o que ya no se soportan puede aumentar el riesgo de amenazas cibernéticas.

Para mantenerse informado de las actualizaciones de productos, recomendamos que se suscriba al Siemens Industrial Security RSS Feed en (<http://www.siemens.com/industrialsecurity>).

Exclusión de responsabilidad para actualizaciones de software ajeno

Este producto incluye software ajeno. Siemens AG solo acepta la garantía de las actualizaciones y los parches en el software ajeno si estos han sido distribuidos en el marco de un acuerdo de servicio de actualizaciones de Siemens o si han sido autorizados oficialmente por Siemens AG. En caso contrario, las actualizaciones y los parches se realizan bajo responsabilidad propia. Encontrará más información sobre nuestro servicio de actualización de software en Internet en Software Update Service (<http://www.automation.siemens.com/mcms/automation-software/en/software-update-service>).

Indicaciones para proteger las cuentas de administrador

Un usuario con derechos de administrador dispone en los sistemas de amplias posibilidades de manipulación y acceso.

Por tanto, debe considerar la protección adecuada de las cuentas de administrador para impedir cambios no autorizados. Use contraseñas seguras y emplee una cuenta de usuario estándar para el funcionamiento regular. En caso necesario deben aplicarse otras medidas, como, por ejemplo, el uso de directivas de seguridad.

Información de seguridad para Mobile Panel 277F IWLan V2 y Mobile Panel 277F IWLan (tag RFID)

Configuración en STEP 7

| ! ADVERTENCIA | |
|--|--|
| El pulsador de PARADA DE EMERGENCIA se evalúa retardadamente. | |
| Si el tiempo de ciclo ajustado para el OB35 es más corto que el tiempo de actualización PNIO, pueden fallar telegramas y con ello retardarse la evaluación de la salida E-STOP del F_FB_RNG_n. | |
| Ajuste para el tiempo de ciclo del OB35 un valor superior al tiempo de actualización PNIO. | |

PROFINET IO

Nota

Solución en caso de congelación esporádica del display y la pantalla táctil

En raras ocasiones puede congelarse el display y la pantalla táctil del panel de operador, con lo que el panel queda inutilizable. Independientemente de ello, la comunicación se mantiene en segundo plano a través de la interfaz PROFINET, p. ej. comunicación PROFIsafe.

Solución:

1. Ponga en un estado seguro la máquina a la que está conectado el panel de operador.
2. Reinicie el panel de operador. Para hacerlo, extraiga la batería principal de su compartimento y pulse la tecla de reinicio (ver también las instrucciones de servicio).

Dirección PROFIsafe del equipo en combinación con el TIA Portal

Nota

Dirección PROFIsafe "65535"

En combinación con el TIA Portal, la dirección PROFIsafe del proyecto no se aplica automáticamente introduciendo el valor de dirección "65535" en el panel de operador.

Comunicación

Bloques de función y controladores

Las tablas siguientes muestran las versiones de F_FB que pueden usarse actualmente con las distintas CPU F y su versión de firmware.

F_FB_MP

| Versión de F_FB | S7-300F/400F | S7-1200F | S7-1500F | Observación |
|-----------------|--------------|----------------|----------------|--|
| 1.0 | o | - | - | Versión tomada de la librería de usuario original |
| 1.2 | o | - | - | Versión tomada de la librería de usuario original |
| 1.3 | x | - | o | Primera versión integrada exclusivamente en el TIA Portal |
| 1.4 | x | - | x | Equivalente a V1.3, para utilizar en TIA V14 |
| 2.0 | x | - | x | Por conformidad IEC, el tipo de datos de las entradas MP_DATA y MP_RNG ha cambiado de "Word" a "Int" |
| 3.0 | x | x ¹ | x ² | Equivalente a V2.0, compatible con nuevas versiones de firmware de los controladores |

x Soportada

- No se soporta

o Ya no se soporta

¹ Soportada para versiones de firmware V4.2 o superiores en combinación con el TIA Portal V14 Update 2

² Soportada para versiones de firmware V2.0 o superiores

F_FB_RNG_4

| Versión de F_FB | S7-300F/400F | S7-1200F | S7-1500F | Observación |
|-----------------|--------------|----------------|----------------|---|
| 1.0 | o | - | - | Versión tomada de la librería de usuario original |
| 1.2 | o | - | - | Versión tomada de la librería de usuario original |
| 1.3 | x | - | o | Primera versión integrada exclusivamente en el TIA Portal |
| 1.4 | x | - | x | Equivalente a V1.3, para utilizar en TIA V14 |
| 2.0 | x | - | x | Por conformidad IEC el tipo de datos de las entradas MPn_DATA * y MPn_F_KEY * ha cambiado de "Word" a "Int" |
| 3.0 | x | x ¹ | x ² | Equivalente a V2.0, compatible con nuevas versiones de firmware de los controladores |

x Soportada

- No se soporta

o Ya no se soporta

* MPn se utiliza para el panel de operador 1 ... 4

¹ Soportada para versiones de firmware V4.2 o superiores en combinación con el TIA Portal V14 Update 2

² Soportada para versiones de firmware V2.0 o superiores

F_FB_RNG_16

| Versión de F_FB | S7-300F/400F | S7-1200F | S7-1500F | Observación |
|-----------------|--------------|----------|----------------|---|
| 1.0 | o | - | - | Versión tomada de la librería de usuario original |
| 1.2 | o | - | - | Versión tomada de la librería de usuario original |
| 1.3 | x | - | o | Primera versión integrada exclusivamente en el TIA Portal |
| 1.4 | x | - | x | Equivalente a V1.3, para utilizar en TIA V14 |
| 2.0 | x | - | x | Por conformidad IEC el tipo de datos de las entradas MPn_DATA * y MPn_F_KEY * ha cambiado de "Word" a "Int" |
| 3.0 | x | - | x ¹ | Equivalente a V2.0, compatible con nuevas versiones de firmware de los controladores |

x Soportada

- No se soporta

o Ya no se soporta

* MPn se utiliza para el panel de operador 1 ... 16

¹ Soportada para versiones de firmware V2.0 o superiores

Nota

Actualización de bloques de función de TIA V13 SP1 y certificación

Durante la actualización a TIA V14 los bloques de función son sustituidos por la correspondiente versión 1.4 de los F_FB, que es equivalente a la versión anterior. En combinación con S7-1500F, las versiones V1.4 de los F_FB poseen una firma funcional distinta. Durante la actualización a TIA V14 recibirá un informe de conversión que muestra la correspondencia entre las firmas anteriores de la V13 y las firmas funcionales de la V14. Con este informe de conversión no es necesario certificar de nuevo los bloques de función, a pesar de que hayan cambiado las firmas. Encontrará más información en el manual de programación y de manejo "SIMATIC Safety - Configuring and Programming", capítulo 1.8.1 "Upgrading projects from STEP 7 Safety V13 SP1 to V14" en Internet (<https://support.industry.siemens.com/cs/ww/en/view/54110126>).

Si se necesita que la versión de los F_FB sea 2.0 o superior, p. ej. para que los controladores tengan conformidad IEC o sean compatibles con versiones superiores de firmware, es necesario certificar de nuevo los bloques de función.

Actualización de bloques de función desde versiones anteriores del TIA V13 SP1

Con ayuda de la descripción incluida en el sistema de información del TIA, realice la migración a V13 SP1 y después observe las indicaciones de la nota "Actualización de bloques de función de TIA V13 SP1 y certificación".

Configuración de FBs F <V2.0

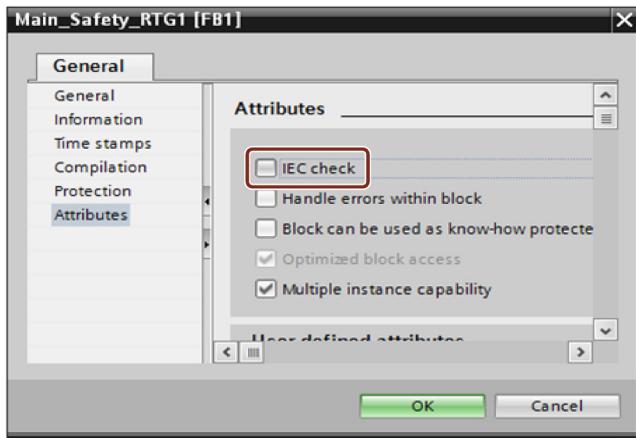
La nota siguiente se aplica si en la configuración se utilizan FBs F de versión < V2.0.

Nota

Desactivación de la verificación CEI

Si en el bloque de función "Main-Safety" está activada la opción "Verificación CEI" no es posible compilar el proyecto.

En las propiedades del bloque de función "Main-Safety" desactive la verificación CEI, ver la figura siguiente.



Tiempos de ejecución de los bloques de función

Encontrará información sobre los tiempos de ejecución de los bloques de función en la FAQ 27097159.
(<https://support.industry.siemens.com/cs/ww/es/view/27097159>)

Normas de seguridad y funcionamiento de seguridad

Normas sobre la seguridad de funcionamiento:

TÜV

TÜV certifica el cumplimiento de las siguientes normas para las funciones de seguridad del panel de operador.

| Norma | Título | Edición |
|-----------------|---|---------------|
| DIN EN 60204-1 | Seguridad de máquinas – Equipo eléctrico de las máquinas - Parte 1: Requisitos generales | 2006 +A1:2009 |
| DIN IEC 62061 | Seguridad de las máquinas. Seguridad funcional de sistemas eléctricos, electrónicos y electrónicos programables relacionados con la seguridad | 2005 +A2:2015 |
| IEC 61508-1 a 4 | Nivel de integridad de la seguridad 3 | 2010 |
| ISO 13850 | Seguridad de las máquinas. Parada de emergencia. Principios para el diseño | 2015 |
| ISO 13849-1 | Performance Level e y categoría 4. | 2015 |

Datos técnicos sobre el funcionamiento de seguridad

- Conforme a IEC 61508

| | |
|--|--------------------------------|
| Arquitectura del hardware | Redundante 1oo2 |
| Frecuencia de solicitud | high demand mode |
| Probability of a dangerous failure per hour (PFH) | < 1,00 × 10 ⁻¹⁰ 1/h |
| Probability of a dangerous failure on demand (PFD) | < 1,70 × 10 ⁻⁶ |
| Clase de seguridad máxima alcanzable | SIL3 |
| Vida útil | 10 años |

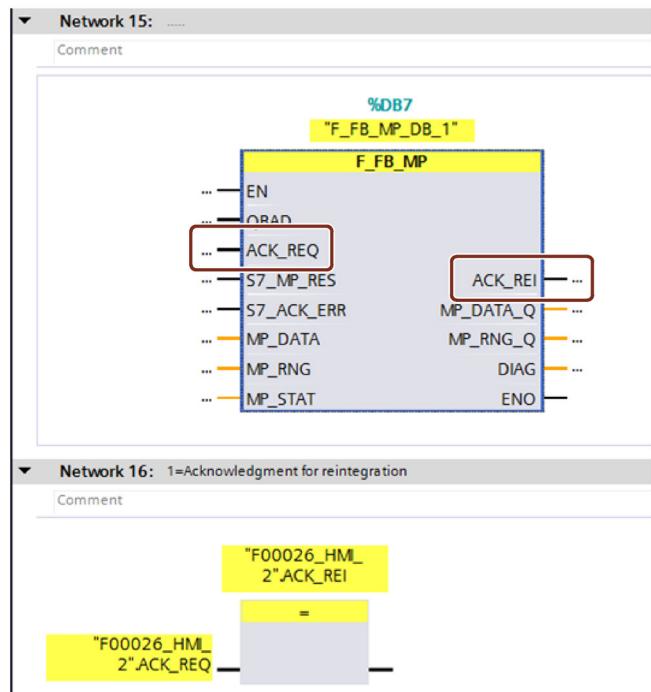
- Conforme a IEC 13849-1

| | |
|-----------------------------|----------|
| Meantime to Failure (MTTFd) | 89 years |
| Diagnostic Coverage | High |
| Performance Level | e |
| Categoría de seguridad | 4 |

Notas sobre el uso de los equipos con TIA V13 SP1

Comunicación PROFIsafe

Si después de conectar el panel de operador o si después de interrumpirse la conexión PROFIsafe con una CPU F la conexión no volviera a establecerse, deberá interconectar el parámetro ACK_REI del F_FB_MP como se indica a continuación: "ACK_REI = ACK_REQ", ver el ejemplo adyacente.



Tenga en cuenta que el tiempo de ejecución del segmento 16 no se incluye en el tiempo de ejecución de los bloques de función.

Instrucciones de servicio en español

Activación del pulsador de parada de emergencia

Por lo general vale lo siguiente: El pulsador de parada de emergencia se activa en cuanto se establece la comunicación PROFIsafe y, con ello, independientemente de que el panel de operador de seguridad haya iniciado sesión en una máquina o no.

Por tanto, en la traducción al español de las instrucciones de servicio "Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (tag RFID)", edición 01/2011, los dos enunciados siguientes deben entenderse como sigue:

- Capítulo 1.15, pág. 42, primer punto de la lista: "El siguiente comportamiento de desconexión de la instalación es válido independientemente de si el panel de operador ha iniciado sesión en una máquina o no."
- Capítulo 2.6, pág. 52, segundo punto de la lista: "El pulsador de parada de emergencia es efectivo en una WLAN independientemente de si el panel de operador ha iniciado sesión en una máquina o no."

Parametrizar la comunicación WLAN - acceso remoto

Es posible realizar el Web Based Management para parametrizar la comunicación WLAN directamente en el panel de operador o, alternativamente, mediante un navegador web o Telnet.

Web Based Management con un navegador web

Al Web Based Management se accede con un navegador web estándar a través del puerto 34965.
Sintaxis: "http://<dirección IP>:34965"

Ejemplo: Si la dirección IP de su panel de operador es "192.168.1.1", introduzca en la barra de dirección del navegador web: "http://192.168.1.1:34965".

Web Based Management mediante Telnet

También es posible configurar WLAN mediante Telnet. A dicho servicio se accede a través del puerto 34966. Los datos de acceso son los mismos que los del acceso web.

Normas y homologaciones

Este apartado contiene información importante sobre normas y homologaciones nacionales del panel de operador en lo que respecta al sistema radioeléctrico.

Nota

La siguiente relación indica las homologaciones posibles.

Para el panel de operador son aplicables únicamente las homologaciones indicadas en el lado posterior del equipo.

Homologación CE



La versión de panel de operador comercializada por Siemens cumple las especificaciones de las directivas europeas siguientes:

99/5/CE

Directiva del Parlamento Europeo y del Consejo sobre la aproximación de las legislaciones de los Estados miembros sobre equipos radioeléctricos y equipos terminales de telecomunicación y reconocimiento mutuo de su conformidad.

La conformidad con los requisitos fundamentales de la Directiva queda certificada con la observancia de las siguientes normas:

| | |
|----------------------------|--|
| EN 60950 | Seguridad de los equipos de tratamiento de la información |
| EN 301489-1 | Compatibilidad electromagnética para los equipos y servicios radioeléctricos |
| EN 301489-17 | Condiciones específicas para sistemas de transmisión en banda ancha y para equipos en redes locales inalámbricas de alta potencia (HIPERLAN) |
| EN 300328 | Cuestiones de compatibilidad electromagnética y espectro radioeléctrico (ERM) - Sistemas de transmisión en banda ancha - equipos de transmisión de dabos que operan en banda de 2,4 GHz-ISM y utilizan técnicas de modulación en banda ancha |
| EN 300440-1 EN 300440-2 | Cuestiones de compatibilidad electromagnética y espectro radioeléctrico (ERM) - Dispositivos de corto alcance - equipos de radio para utilizar en el rango de frecuencias entre 1 Ghz a 40 GHz |
| EN 301893 | Redes de acceso por radio de banda ancha (BRAN); RLAN de alto rendimiento en la banda de 5 GHz |
| EN 50371 | Cumplimiento de aparatos eléctricos y electrónicos de baja potencia con las restricciones básicas relativas a la exposición de las personas a los campos electromagnéticos (10 MHz - 300 GHz) |
| 1999/519/EC | Recomendación del Consejo relativa a la exposición del público en general a campos electromagnéticos (0 Hz a 300 GHz) |

Los equipos conectados al sistema deben cumplir las consignas de seguridad relevantes.

Declaración de conformidad UE

Los certificados de conformidad CE para las autoridades competentes pueden solicitarse en:

Siemens AG
Digital Factory
Factory Automation
DF FA AS SYS
Postfach 1963
D-92209 Amberg

Esta declaración certifica el cumplimiento de las directivas mencionadas pero no garantiza las características.

La declaración de conformidad CE sobre la Directiva CEM se puede descargar de Internet:

Certificados de Mobile Panels 277(F) IWLan (<https://support.industry.siemens.com/cs/ww/es/ps/14751/cert>)

Homologación UL



Underwriters Laboratories Inc. según:

- UL 60950-1 – Information Technology Equipment – Safety
Part 1: General Requirements – Edition 2 – Issue Date 2007/03/27
- CSA C22.2 No. 60950-1 (2nd Edition) – Information Technology Equipment – Safety
Part 1: General Requirements – Edition 2 – Issue Date 2007/03/27

La homologación sólo se cumple en el uso con batería principal o de forma estacionaria en la estación de carga.

Approval according to FCC

This device complies with Part 15 of the FCC Rules

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation.

IEEE802.11b or g operation of this product in the USA is firmware-limited to channels 1 through 11.

Notice

Changes or modifications made to this equipment not expressly approved by SIEMENS may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Notice

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Professional Installation Notice:

To comply with FCC Part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

Within the 5.15-5.25 GHz band, this device is only for indoor use operations to reduce any potential for harmful interference to co-channel MSS operations.

RSS-210 of Industry Canada

"Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

"This device has been designed to operate with internal antennas with a maximum gain of 2 dBi and an antenna impedance of 50 Ohms. Other antennas are strictly prohibited for use with this device."

"To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication."

That the device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems."

"Users should also be cautioned to take note that high power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices."

Homologaciones nacionales

Nota

La siguiente relación indica las homologaciones para transmisión radioeléctrica en los distintos países.

Para el panel de operador son aplicables únicamente las homologaciones indicadas en el lado posterior del equipo.

| Country | Identification | Approval granted | Country | Identification | Approval granted | Country | Identification | Approval granted |
|----------------------|----------------|------------------|-----------------|----------------|------------------|--------------------------|----------------|------------------|
| Australia | | ✓ | Hong Kong | | | Portugal | | ✓ |
| Austria | | ✓ | Hungary | | ✓ | Romania | | ✓ |
| Bahrain ¹ | | ✓ | Ireland | | ✓ | Russia | | |
| Belgium | | ✓ | Iceland | | ✓ | Singapore | | |
| Bulgaria | | ✓ | Italy | | ✓ | Slovakia | | ✓ |
| Canada | | ✓ | Japan | | ✓ | Slovenia | | ✓ |
| China | 電訊管理局 | ✓ | Kuwait | | | Spain | | ✓ |
| Cyprus | | ✓ | Latvia | | ✓ | South Africa | | ✓ |
| Czech Republic | | ✓ | Liechtenstein | | ✓ | South Korea | | ✓ |
| Denmark | | ✓ | Lithuania | | ✓ | Sweden | | ✓ |
| Estonia | | ✓ | Luxembourg | | ✓ | Switzerland | | ✓ |
| Finland | | ✓ | Malaysia | | | Taiwan | | ✓ |
| France | | ✓ | Malta | | ✓ | Turkey | | ✓ |
| Germany | | ✓ | The Netherlands | | ✓ | Ukraine | | |
| Great Britain | | ✓ | Norway | | ✓ | United States of America | | ✓ |
| Greece | | ✓ | Poland | | ✓ | | | |

¹ Para utilizar el dispositivo en Bahréin es necesario registrarse en la dirección siguiente:

TRA Bahrain (<http://www.tra.org.bh/en/index>)

Siemens AG
Division Digital Factory
Postfach 48 48
90026 NÜRNBERG
ALEMANIA

Mobile Panel 277 IWLAN V2, Mobile Panel 277F IWLAN V2, Mobile Panel 277F IWLAN (tag RFID)
A5E03357930-AH, 03/2017

Mobile Panel 277 IWLAN V2、Mobile Panel 277F IWLAN V2、 Mobile Panel 277F IWLAN (RFIDタグ)

製品情報



A5E03357930

この製品情報には、重要な情報が含まれています。この注意事項は、HMIデバイスの操作説明書を補足し、操作説明書、リースノート、オンラインヘルプの記述より優先されます。

適用範囲

この製品情報は、次のHMIデバイスに適用されます。

- Mobile Panel 277 IWLAN V2

商品番号:

- 6AV6 645-0DD01-0AX1
- 6AV6 645-0DD02-0AX1
- 6AV6 645-0DE01-0AX1
- 6AV6 645-0DE02-0AX1
- 6AV6 645-0FD01-0AX1
- 6AV6 645-0FE01-0AX1



- Mobile Panel 277F IWLAN V2

商品番号:

- 6AV6 645-0EB01-0AX1
- 6AV6 645-0EB02-0AX1
- 6AV6 645-0EC01-0AX1
- 6AV6 645-0EC02-0AX1
- 6AV6 645-0GB01-0AX1
- 6AV6 645-0GC01-0AX1



- Mobile Panel 277F IWLAN V2 RFID

商品番号:

- 6AV6 645-0EF01-0AX1
- 6AV6 645-0EF02-0AX1
- 6AV6 645-0GF01-0AX1



承認と認定書を確認してください。

注記

HMIデバイス自体の認証は、背面パネルのラベルに表示されています。

Mobile Panel 277 IWLAN V2、Mobile Panel 277F IWLAN V2、および Mobile Panel 277F IWLAN (RFIDタグ)の安全に関する注意事項

設定

注記

WinCC flexibleソフトウェアのマッチングの必要性

次のいずれかのソフトウェアパッケージを使用してHMIデバイスを構成します。

- "WinCC flexible 2008 SP2"と"HSP Mobile Panel 277 Wireless V2"
- HMIデバイス用にリリースされたWinCC/バージョン (TIA Portal)。

拡張PROFINET診断なしのコントローラ用の移行GSDMLファイル

HMIデバイスは拡張PROFINET診断をサポートしており、同様に拡張PROFINET診断をサポートしているPROFINET IOコントローラでのみ操作が可能です。

拡張PROFINET診断をサポートしていないPROFINET IOコントローラでHMIデバイスを操作するには、移行GSDMLファイルが必要です。

インストールの説明が付いたHMIデバイス用の移行GSDMLファイルは以下のインターネットで入手可能です。

移行GSDMLファイルMobile Panel 277 (F) IWLAN V2/(RFIDタグ)

(<http://support.automation.siemens.com/WW/view/en/19241467>)

LANおよびWLANによる通信

注記

複数のアクセスポイントとの通信はiPCF-MCを使用する場合にのみ可能

iPCF-MCを使用しないで、より広いWLANエリアをカバーするために、複数のアクセスポイントとの通信を障害なく行うことはできません。

より広いWLANエリアをカバーするには、iPCF-MCを使用して、複数のアクセスポイントと通信してください。

AESを備えたWPA2のみ使用

最高レベルの安全性でWLAN通信を行うには、必ずWPA2 AESを使用してください。十分な長さで推測するのが困難である適切なパスワードおよびキーを選ぶことで、このプロセスは最新の安全対策に適合しています。

干渉のないデータネットの必要性

HMIデバイスの信頼性の高い操作は干渉のないデータネットでのみ保証されます。外部の無線ネットワークとの干渉によって、HMIデバイスの過負荷が引き起こされることがあります。

PROFINET IO、HTTP、Sm@rtAccess、Sm@rtService、OPCなどのワイヤレスEthernetベースの通信の場合、エンドユーザーが自分のデータネットワークのセキュリティに責任を負います。

SiemensアクセスポイントSCALANCEの「ストームしきい値」機能を有効化する必要があります。このオプションを選択すれば、ネットワークの負荷が高い場合でも、安定したプラント操業を保証できます。ブロードキャストメッセージフレームを作るには、以下の設定を行ないます：

- アドレスしきい値:255
- ワイヤレス:255。

データネットワークのIPアドレス

アドレス範囲 (169.254.2.252 ~ 169.254.2.255) は、内部のデバイスによって占められており、どんな場合でも設定されるデータネットワークに含まれることはあります。

デバイスの内部通信に影響を与えないために、「リンク・ローカル」のアドレス範囲 (169.254.*.*) のアドレスを使用することはありません。

通知

最大許容送信出力

HMIデバイスを操作する国に対する最大許容IWLWAN送信出力に関する注記:

- 米国: -14 dBm
- EU諸国: -11 dBm
- 他のすべての国: -17 dBm

お使いのHMIデバイスの送信出力を設定するにはこれらの手順に従ってください。

1. HMIデバイスのデスクトップにある[WLAN V2 Config]ツールを開きます。



2. [Interfaces > WLAN > Advanced]を選択します。

3. [Transmit Power]値をお使いの国で許容されている送信出力に設定します。

周囲温度

HMIデバイスは、周囲温度0°C ~ 40°Cの範囲で使用するように設計されています。

注記

HMIデバイスでのメインバッテリの充電

HMIデバイスの電源をオンにして、充電ステーションに置いたままにすると、次が適用されます。HMIデバイスでのメインバッテリの充電は、周囲温度が40°Cになるまで保持されます。

充電ステーションの充電ケースによるバッテリ充電

異なる周囲温度におけるバッテリ充電の詳細については、充電ステーションに付属している製品情報に記載されています。

USBインターフェースの仕様

注記

USBインターフェースは、コミッショニングと保守のみに使用します。

接続されているUSBデバイスのケーブルの最大長さは3 mです。

PROFINET IO

注記

使用しているアプリケーションの安全性を高めるには、CPUアプリケーションでライフサインビットを要求します。ライフサインビットの値が変化しない場合、PROFINET IO通信は中断されます。すべてのPROFINET IOステーションがオンであり、問題なく機能していることを確認します。

充電ステーション

充電ステーションは、EN 61131-2:2007およびEN 60950-1:2006に準拠した安全等級IIIに対応しています。

日本における注意事項

注記

チャンネル184～192でのアクセスポイントとの接続不能

Mobile Panel 277F IWLANを5 GHz帯域で操作し、アクセスポイントとのWLAN接続にチャンネル184～192のどれか1つを使用する場合、アクセスポイントとの接続が確立されない場合があります。

この場合にはWLANチャンネル184～192を使用しないでください。操作説明書の「WLAN通信パラメータの割り付け」の章を参照してください。

Notes for use in Korea

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

This equipment is Industrial (Class A) electromagnetic wave suitability equipment and seller or user should take notice of it, and this equipment is to be used in the places except for home.

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

This device shall not be used for life-safety related service due to radio interference possibility.

Industrial Security

Siemensは、工場設備、システム、機械およびネットワークの安全な稼動をサポートする産業セキュリティ機能を有する製品やソリューションを提供しています。

工場設備、システム、機械およびネットワークをサイバー脅威から保護するため、総合的な、最新の産業セキュリティコンセプトを実装し、継続的にメンテナンスすることが必要です。Siemensの製品およびソリューションは、それらのコンセプトの1つの要素のみを形成します。

お客様は、工場設備、システム、機械およびネットワークへの許可されていないアクセスを防ぐ責任があります。システム、機械および構成部品は、必要な範囲かつ適切なセキュリティ措置(ファイアウォールまたはネットワークセグメンテーションを使用)が適所で実施されている場合に、エンタープライズネットワークまたはインターネットにのみ接続する必要があります。

さらに、適切なセキュリティ措置に対するSiemensのガイダンスを考慮に入れる必要があります。産業セキュリティに関する詳細情報については、Hotspot-Text (<http://www.siemens.com/industrialsecurity>)を参照してください。

Siemensの製品およびソリューションは、セキュリティを向上させるための継続的な開発を経たものです。Siemensは、製品更新を入手可能になり次第速やかに適用し、最新の製品バージョンを常に使用することを強くお勧めします。もはやサポートされていない製品バージョンを使用して、最新の更新適用を怠ってしまうと、お客様のサイバー脅威への暴露を高めてしまうことがあります。

製品更新の最新情報を入手するため、Siemensの産業セキュリティのRSSフィード（<http://www.siemens.com/industrialsecurity>）を購読します。

サードパーティ製ソフトウェアの更新に関する免責事項

この製品には、サードパーティ製のソフトウェアが含まれています。Siemens AGは、サードパーティ製ソフトウェアがSiemensソフトウェアアップデートサービス契約の一部として配布されている場合またはSiemens AGによって正式にリリースされている場合のみ、サードパーティ製ソフトウェアの更新/パッチに対する保証を提供します。それ以外の場合は、更新/パッチは、ユーザーご自身の責任で適用することになります。当社のソフトウェアアップデートサービスに関する詳細な情報は、インターネットのソフトウェアアップデートサービス（<http://www.automation.siemens.com/mcms/automation-software/en/software-update-service>）を参照してください。

管理者アカウントの保護に関する注意

管理者権限を持つユーザーは、システムにおける広範囲に及ぶアクセス権および変更権限を有しています。

そのため、承認なく変更が加えられるのを避けるため、管理者アカウントを保護するために適切な措置を講じる必要があります。これを行うため、安全なパスワードを使用し、通常の操作には標準のユーザーアカウントを使用するようにします。その他の措置として、必要に応じて、セキュリティポリシーなどを使用することもできます。

Mobile Panel 277 IWLAN V2および Mobile Panel 277F IWLAN (RFIDタグ)の安全情報

STEP 7でのコンフィグレーション

| |
|---|
|  警告 |
| 遅延がある場合の緊急停止ボタンの評価 OB35で設定されたサイクル時間がPNIO更新時間より短い場合、メッセージフレームのエラーやF_FB_RNG_nの"E-STOP"出力の評価の遅延などのリスクがあります。 OB35のサイクル時間を、PNIO更新時間より高い値に設定します。 |

PROFINET IO

注記

ディスプレイやタッチスクリーンの散在的なフリーズに対する解決策

まれに、HMIデバイスのディスプレイやタッチスクリーンがフリーズして、デバイスを操作できなくなることがあります。これには無関係に、PROFINETインターフェースを介した通信(例えば、PROFIsafe通信)はバックグラウンドで継続されています。

解決策:

1. HMIデバイスが接続されているマシンを安全状態にします。
2. HMIデバイスを再起動します。バッテリー収納部からメイン充電可能バッテリーを取り出し、リセットボタンを押します(取扱説明書も参照してください)。

TIA Portalに接続されているデバイスのPROFI safeアドレス

注記

PROFI safeアドレス「65535」

TIA Portalに関連して、HMIデバイスにアドレス値「65535」を入力することでプロジェクトからPROFI safeアドレスが自動的に適用されるわけではありません。

通信

機能ブロックおよびコントローラ

下記の表は、任意のF-CPUに対して現在使用可能なF_FB/バージョンおよびそのファームウェアバージョンを示しています。

F_FB_MP

| F_FB/バージョン | S7-300F/400F | S7-1200F | S7-1500F | コメント |
|------------|--------------|----------------|----------------|---|
| 1.0 | o | - | - | 元のユーザーライブラリから転送されたバージョン |
| 1.2 | o | - | - | 元のユーザーライブラリから転送されたバージョン |
| 1.3 | x | - | o | TIA Portalで専用に統合された最初のバージョン |
| 1.4 | x | - | x | V1.3と同等(TIA V14での使用対応) |
| 2.0 | x | - | x | 入力MP_DATAおよびMP_RNGのデータタイプが、IEC適合性のために「Word」から「Int」に変更 |
| 3.0 | x | x ¹ | x ² | V2.0と同等(コントローラの新しいファームウェアバージョンと互換性がある) |

x サポートあり

- サポートなし

o すでにサポートされていない

¹ TIA Portal V14アップデート2に関連してV4.2以降のファームウェアバージョンに対してサポートされている

² V2.0以降のファームウェアバージョンに対してサポートされている

F_FB_RNG_4

| F_FB/バージョン | S7-300F/400F | S7-1200F | S7-1500F | コメント |
|------------|--------------|----------------|----------------|---|
| 1.0 | ○ | - | - | 元のユーザーライブラリから転送されたバージョン |
| 1.2 | ○ | - | - | 元のユーザーライブラリから転送されたバージョン |
| 1.3 | × | - | ○ | TIA Portalで専用に統合された最初のバージョン |
| 1.4 | × | - | × | V1.3と同等(TIA V14での使用対応) |
| 2.0 | × | - | × | 入力MPn_DATAおよびMPn_F_KEYのデータタイプが、IEC適合性のために「Word」から「Int」に変更 |
| 3.0 | × | × ¹ | × ² | V2.0と同等(コントローラの新しいファームウェアバージョンと互換性がある) |

× サポートあり

- サポートなし

○ すでにサポートされていない

* MPnはHMIデバイス1~4に対して使用されている

¹ TIA Portal V14アップデート2に関連してV4.2以降のファームウェアバージョンに対してサポートされている

² V2.0以降のファームウェアバージョンに対してサポートされている

F_FB_RNG_16

| F_FB/バージョン | S7-300F/400F | S7-1200F | S7-1500F | コメント |
|------------|--------------|----------|----------------|---|
| 1.0 | ○ | - | - | 元のユーザーライブラリから転送されたバージョン |
| 1.2 | ○ | - | - | 元のユーザーライブラリから転送されたバージョン |
| 1.3 | × | - | ○ | TIA Portalで専用に統合された最初のバージョン |
| 1.4 | × | - | × | V1.3と同等(TIA V14での使用対応) |
| 2.0 | × | - | × | 入力MPn_DATAおよびMPn_F_KEYのデータタイプが、IEC適合性のために「Word」から「Int」に変更 |
| 3.0 | × | - | × ¹ | V2.0と同等(コントローラの新しいファームウェアバージョンと互換性がある) |

× サポートあり

- サポートなし

○ すでにサポートされていない

* MPnはHMIデバイス1~16に対して使用されている

¹ V2.0以降のファームウェアバージョンに対してサポートされている

注記

TIA V13 SP1からの機能ブロックのアップグレードおよび証明書

TIA V14へのアップグレード中に、対応する機能ブロックが以前のバージョンと同等の、対応するF_FB/バージョン1.4ブロックに置き換えられます。F_FB/バージョンV1.4には、S7-1500Fに関連した変更された機能署名があります。TIA V14へのアップグレードの一部として、以前のV13署名の割り当てを使用するプロトコルからV14の機能署名への変換を受信します。機能ブロックの新しい証明書は、署名の変更にも関わらず、このプロトコル変換では必要ありません。インターネット(<https://support.industry.siemens.com/cs/www/en/view/54110126>)にあるプログラミングと操作に関するマニュアル『SIMATIC安全性 - 構成とプログラミング』のセクション1.8.1「STEP 7 Safety V13 SP1からV14へのプロジェクトのアップグレード」で追加情報を参照できます。

F_FBバージョン2.0以降が必要な場合(例えば、IEC適合性やコントローラのより高いファームウェアバージョンのため)、機能ブロックを再度認証する必要があります。

TIA V13 SP1の以前のバージョンからの機能ブロックのアップグレード

TIA情報システムで説明されているように、V13 SP1への移行を実行します。次いで、「TIA V13 SP1からの機能ブロックのアップグレードおよび証明書」の注記を読んでください。

V2.0より前のF-FBの構成

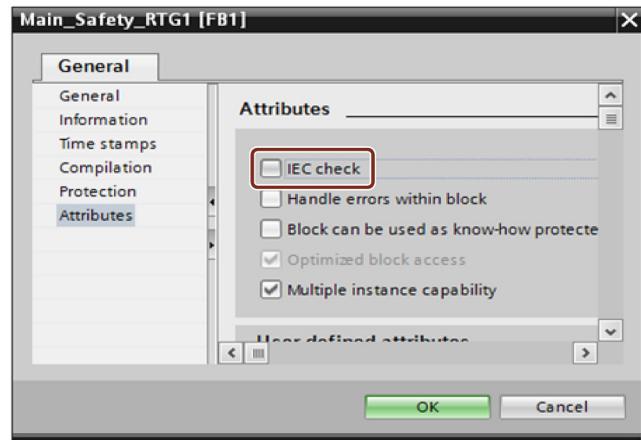
V2.0より前のF-FBを使用するとき、構成には次の注記が適用されます。

注記

IECチェックの無効化

[IECチェック]オプションが[Main-Safety]機能ブロックで有効になっている場合、プロジェクトをコンパイルすることができません。

[Main-Safety]機能ブロックのプロパティでIECチェックを無効にします。下記の図を参照してください。



機能ブロックの実行時間

機能ブロックの実行時間に関する情報は、FAQ 27097159で使用可能です
(<https://support.industry.siemens.com/cs/ww/de/view/27097159>)。

安全規格およびフェールセーフ動作

操作の安全性に関する規格

TÜV

TÜVは、HMIデバイスがその安全機能に関して、下記の規格の要件を満たしていることを認めています。

| 規格 | タイトル | 発行年 |
|-----------------|---|--------------|
| DIN EN 60204-1 | 機械の安全性 - 機器の電気装置 - パート1:一般要件 | 2006+A1:2009 |
| DIN IEC 62061 | 機械の安全性 – 安全に関連した電気的、電子的、プログラム可能電子制御システムの機能上の安全性 | 2005+A2:2015 |
| IEC 61508-1 ~ 4 | 安全度水準3 | 2010 |
| ISO 13850 | 機械の安全性 – 緊急停止 – 設計の原則 | 2015 |
| ISO 13849-1 | パフォーマンスレベルeおよびカテゴリ4 | 2015 |

フェイルセーフ操作の技術仕様

- IEC 61508に準拠

| | |
|--------------------|-------------------------------|
| ハードウェアアーキテクチャ | 冗長1oo2 |
| リクエスト比 | 高デマンドモード |
| 時間当たり危険側故障確率(PFH) | < 1.00×10^{-10} 1/時間 |
| オンデマンド危険側故障確率(PFD) | < 1.70×10^{-6} |
| 達成可能な最大安全レベル | SIL3 |
| 耐用年数 | 10年 |

- IEC 13849-1に準拠

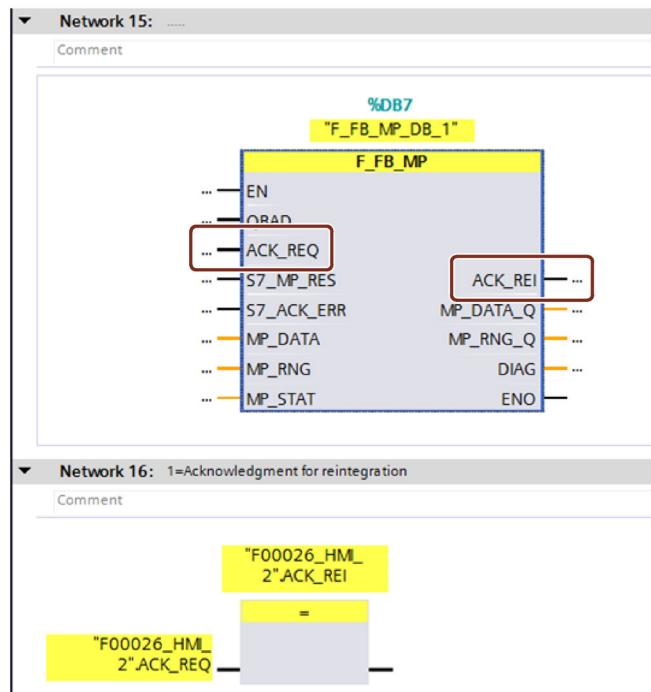
| | |
|------------------|-----|
| 故障までの平均時間(MTTFd) | 89年 |
| 自己診断率 | 高 |
| パフォーマンスレベル | e |
| 安全カテゴリ | 4 |

TIA V13 SP1のデバイスの使用に関する注記

PROFIsafe通信

HMIデバイスの電源がオンになるときやF-CPUへのPROFIsafe接続の中断後に、この接続が自動的に確立されなかつた場合、出力パラメータACK_REQ (F_FB_MP側)を次のようにして内部接続する必要があります。「ACK_REQ = ACK_REQ」。右の例を参照してください。

ネットワーク16の実行時間が機能ブロックの実行時間に含まれていないことに注意してください。



スペイン語の操作説明書

緊急停止ボタンの有効化

一般ルール:緊急停止ボタンは、PROFIsafe通信が確立されるとすぐに有効になるため、フェールセーフHMIデバイスがマシンで登録されているかどうかには依存しません。

この理由で、Mobile Panel 277 IWLAN V2、Mobile Panel 277F IWLAN V2、Mobile Panel 277F IWLAN (RFIDタグ)のスペイン語の取扱説明書(2011年1月版)では、例えば、次の2つの記述を次のように理解する必要があります。

- セクション1.15、42ページの1つ目のリスト項目:「El siguiente comportamiento de desconexión de la instalación es válido independientemente de si el panel de operador ha iniciado sesión en una máquina o no.」
- セクション2.6、52ページの2文目:「El pulsador de parada de emergencia es efectivo en una WLAN independientemente de si el panel de operador ha iniciado sesión en una máquina o no.」

WLAN通信のパラメータ化 - リモートアクセス

Webベースの管理によって、HMIデバイスで直接、あるいはウェブブラウザやTelnetを通じてWLAN通信をパラメータ化することができます。

ウェブブラウザによるWebベースの管理

標準的なウェブブラウザで、ポート34965を使用して、Webベースの管理にアクセスできます。

構文: 「<http://<IPアドレス>:34965>」

例: 使用しているHMIデバイスのIPアドレスが「192.168.1.1」であれば、ウェブブラウザのアドレスバーに「<http://192.168.1.1:34965>」と入力します。

Telnet経由でのWebベースの管理

また、Telnetを使用してWLAN構成を設定することもできます。このサービスには、ポート34966を介して接続できます。ウェブアクセステーブルに対応するアクセステーブル。

規格と承認

この節には無線システムの規格と各国における承認に関する重要な情報が記載されています。

注記

以下に、使用できる承認の概要を示します。

HMIデバイス自体の認証は、背面パネルのラベルに表示されています。

CE承認



Siemensが提供するバージョンのHMIデバイスは、以下の欧州指令の規制に準拠します。

99/5/EC

無線装置と通信端末装置および適合性の相互承認に関する欧州議会および欧州理事会指令。

ガイドラインの基本要件との互換性は、以下の規格に準拠することによって証明されています。

| | |
|----------------------------|--|
| EN 60950 | 情報テクノロジ装置の安全性 |
| EN 301489-1 | 無線装置とサービスの電磁互換性 |
| EN 301489-17 | ブロードバンドデータ伝送システムとローカル高性能無線ネットワークの装置のための固有の要件(HIPERLAN) |
| EN 300328 | 電磁両立性および周波数問題(ERM) - 广帯域伝送システム - 2.4 GHz ISM帯域で動作し、広帯域変調技術を使用するデータ伝送装置 |
| EN 300440-1 EN 300440-2 | 電磁両立性および周波数問題(ERM) - 短波装置 - 1 GHzから40 GHzの周波数範囲で使用される無線装置 |
| EN 301893 | 広帯域無線アクセスネットワーク(BRAN) - 5 GHzの高性能RLAN |
| EN 50371 | 電磁界への人体のばく露に関し基本制限のある低電力電子および電気装置の準拠(10 MHzから300 GHz) |
| 1999/519/EC | 電磁界への公衆のばく露の限界に関する議会の推奨事項(0 Hzから300 GHz) |

システムに接続されているデバイスは、該当する安全規制に適合する必要があります。

EC適合性宣言

EC適合性宣言は、次の所在地の関係当局から入手できます。

Siemens AG
Digital Factory
Factory Automation
DF FA AS SYS
Postfach 1963
D-92209 Amberg

この宣言は、上記の指令に準拠していることを認定するものであり、特定の特性を保証するものではありません。

EC適合性宣言をダウンロードするには、次のアドレスにアクセスしてください。

Mobile Panel 277(F) IWLAN証明書 (<https://support.industry.siemens.com/cs/ww/en/ps/14751/cert>)

UL承認



Underwriters Laboratories Inc.、以下の標準に準拠

- UL 60950-1 – 情報テクノロジ装置 – 安全性
第1部：一般的の要件 – 第2版 – 発行日: 2007年3月27日
- CSA C22.2 No. 60950-1 (第2版) – 情報テクノロジ装置 – 安全性
第1部：一般的の要件 – 第2版 – 発行日: 2007年3月27日

承認が有効なのは、バッテリ駆動または充電ステーションで据え置きとなっている場合だけです。

Approval according to FCC

This device complies with Part 15 of the FCC Rules

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation.

IEEE802.11b or g operation of this product in the USA is firmware-limited to channels 1 through 11.

Notice

Changes or modifications made to this equipment not expressly approved by SIEMENS may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Notice

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Professional Installation Notice:

To comply with FCC Part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

Within the 5.15-5.25 GHz band, this device is only for indoor use operations to reduce any potential for harmful interference to co-channel MSS operations.

RSS-210 of Industry Canada

"Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

"This device has been designed to operate with internal antennas with a maximum gain of 2 dBi and an antenna impedance of 50 Ohms. Other antennas are strictly prohibited for use with this device."

"To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication."

That the device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems."

"Users should also be cautioned to take note that high power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices."

国による承認

注記

各国の無線承認の概要は以下の通りです。

HMIデバイス自体の認証は、背面パネルのラベルに表示されています。

| Country | Identification | Approval granted | Country | Identification | Approval granted | Country | Identification | Approval granted |
|----------------------|----------------|------------------|-----------------|----------------|------------------|--------------------------|----------------|------------------|
| Australia | | ✓ | Hong Kong | | | Portugal | | ✓ |
| Austria | | ✓ | Hungary | | ✓ | Romania | | ✓ |
| Bahrain ¹ | | ✓ | Ireland | | ✓ | Russia | | |
| Belgium | | ✓ | Iceland | | ✓ | Singapore | | |
| Bulgaria | | ✓ | Italy | | ✓ | Slovakia | | ✓ |
| Canada | | ✓ | Japan | | ✓ | Slovenia | | ✓ |
| China | 電訊管理局 | ✓ | Kuwait | | | Spain | | ✓ |
| Cyprus | | ✓ | Latvia | | ✓ | South Africa | | ✓ |
| Czech Republic | | ✓ | Liechtenstein | | ✓ | South Korea | | ✓ |
| Denmark | | ✓ | Lithuania | | ✓ | Sweden | | ✓ |
| Estonia | | ✓ | Luxembourg | | ✓ | Switzerland | | ✓ |
| Finland | | ✓ | Malaysia | | | Taiwan | | ✓ |
| France | | ✓ | Malta | | ✓ | Turkey | | ✓ |
| Germany | | ✓ | The Netherlands | | ✓ | Ukraine | | |
| Great Britain | | ✓ | Norway | | ✓ | United States of America | | ✓ |
| Greece | | ✓ | Poland | | ✓ | | | |

¹ バーレーンにあるデバイスを操作するには、次のアドレスで登録する必要があります。

TRA Bahrain (<http://www.tra.org.bh/en/index>)

SIEMENS

SIMATIC HMI

이동 패널 277 IWLAN V2, 이동 패널 277F IWLAN V2, 이동 패널 277F IWLAN(RFID 태그) 제품 정보



A5E03357930

본 제품 정보에는 중요한 정보가 포함되어 있습니다. 이 부록의 정보는 HMI 디바이스의 조작 지침을 보충하고 조작 지침, 릴리스 정보 및 온라인 도움말의 내용보다 우선합니다.

범위

본 제품 정보는 다음 HMI 디바이스에 적용됩니다.

- 이동 패널 277 IWLAN V2
 - 품목 번호:
 - 6AV6 645-0DD01-0AX1
 - 6AV6 645-0DD02-0AX1
 - 6AV6 645-0DE01-0AX1
 - 6AV6 645-0DE02-0AX1
 - 6AV6 645-0FD01-0AX1
 - 6AV6 645-0FE01-0AX1
- 이동 패널 277F IWLAN V2
 - 품목 번호:
 - 6AV6 645-0EB01-0AX1
 - 6AV6 645-0EB02-0AX1
 - 6AV6 645-0EC01-0AX1
 - 6AV6 645-0EC02-0AX1
 - 6AV6 645-0GB01-0AX1
 - 6AV6 645-0GC01-0AX1
- 이동 패널 277F IWLAN V2 RFID
 - 품목 번호:
 - 6AV6 645-0EF01-0AX1
 - 6AV6 645-0EF02-0AX1
 - 6AV6 645-0GF01-0AX1



승인서 및 인증서 내용을 준수합니다.

참고

HMI 디바이스는 후면 패널의 라벨에 표시된 바와 같이 인증되었습니다.

이동 패널 277 IWLAN V2, 이동 패널 277F IWLAN V2 및 이동 패널 277F IWLAN(RFID 태그)의 안전 주의사항

구성하기

참고

부합하는 WinCC flexible 소프트웨어가 필요함

다음과 같은 소프트웨어 패키지 중 하나를 사용해 HMI 디바이스를 구성하십시오.

- "WinCC flexible 2008 SP2" 및 "HSP Mobile Panel 277 Wireless V2"
- HMI 디바이스용으로 릴리스된 WinCC(TIA Portal) 버전

확장 PROFINET 진단을 지원하지 않는 컨트롤러용 Migration GSDML 파일

HMI 디바이스는 확장된 PROFIENT 진단을 지원하며, 확장 PROFINET 진단도 지원하는 PROFINET IO 컨트롤러에서만 작동할 수 있습니다.

확장 PROFINET 진단을 지원하지 않는 PROFINET IO 컨트롤러에서 HMI 디바이스를 작동하려면 Migration GSDML 파일이 필요합니다.

설치 안내서를 비롯한 HMI 디바이스용 Migration GSDML 파일은 다음 위치에서 온라인으로 찾을 수 있습니다.

Migration GSDML 파일 이동 패널 277 (F) IWLAN V2(RFID 태그)

(<http://support.automation.siemens.com/WW/view/en/19241467>)

LAN 및 WLAN 통신

참고

iPCF-MC만을 통해 가능한 여러 접근점을 이용한 통신

iPCF-MC를 이용하지 않을 경우, 중단 없이 대규모 WLAN 범위를 수용하기 위해 둘 이상의 접근점을 통해 통신할 수 없습니다.

대규모 WLAN 범위를 수용하기 위해 여러 접근점과 통신하려면 iPCF-MC를 사용합니다.

ASE를 이용한 WPA2만 사용

최고 수준의 보안을 적용한 WLAN 통신을 위해서는 WPA2 AES만 사용합니다. 추측하기 어렵도록 충분한 길이의 적절한 암호와 키를 선택할 경우 이 프로세스가 최신 보안 방법에 부합됩니다.

간섭 없는 데이터 네트워크 필요

간섭 없는 데이터 네트워크에서만 안정적인 HMI 디바이스의 작동을 보장할 수 있습니다. 무선 네트워크에 영향을 미치는 간섭은 외부적으로 HMI 디바이스의 과부하와 같은 상황을 일으킬 수 있습니다.

무선 이서네트 기반 통신(예: PROFINET IO, HTTP, Sm@rtAccess, Sm@rtService 및 OPC)의 경우 최종 사용자가 데이터 네트워크 보안에 대한 책임이 있습니다.

Siemens Access Point SCALANCE에서 "Storm Threshold" 기능을 활성화시켜야 합니다. 이 옵션은 네트워크 부하가 높을 경우 안정적인 플랜트 운영을 위해 선택해야 합니다. 브로드캐스트 메시지 프레임에는 다음과 같은 설정이 이루어져야 합니다.

- 주소 문턱값: 255
- 무선: 255.

데이터 네트워크에서 IP 주소

169.254.2.252부터 169.254.2.255 까지의 주소 범위는 내부적으로 디바이스가 점유하고 있으며 어떠한 경우에도 구성된 데이터 네트워크에는 포함할 수 않습니다.

디바이스의 내부 통신을 간섭하지 않으려면 "링크-로컬" 주소 범위(169.254.*.*.)를 사용하지 마십시오.

유의사항

최대 허용 전송 전력

HMI 디바이스를 조작하는 국가에서 허용되는 최대 IWLAN 전송 전력 참조

- 미국: -14 dBm
- 유럽연합 국가: -11 dBm
- 기타 모든 국가: -17 dBm

HMI 디바이스 전송 전력을 설정하려면 다음 단계를 따르십시오.

- HMI 디바이스의 데스크톱에서 "WLAN V2 Config" 도구를 여십시오.



- "Interfaces > WLAN > Advanced"를 선택하십시오.

- "Transmit Power" 값을 귀하의 국가에서 허용되는 전송 전력으로 설정하십시오.

주변 온도

HMI 디바이스는 0°C ~ +40°C의 주변 온도에서 사용하도록 고안되었습니다.

참고

HMI 디바이스에서 기본 배터리 충전

HMI 디바이스를 켜고 충전기에 거치하는 경우 다음 사항이 적용됩니다. HMI 디바이스의 기본 배터리는 최대 40°C의 주변 온도에서 충전시킬 수 있습니다.

충전기의 충전 격실에서 배터리 충전

다양한 주변 온도에서의 배터리 충전에 대한 자세한 내용은 충전기와 함께 제공된 제품 정보에 나와 있습니다.

USB 인터페이스 사양

참고

USB 인터페이스는 시동 및 유지 관리 용도로만 사용할 수 있습니다.

연결된 USB 디바이스의 최대 선로 길이는 3 m입니다.

PROFINET IO

참고

응용 프로그램의 안전성을 높이려면 CPU 응용 프로그램의 수명 부호 비트(life sign bit)를 요청합니다. 수명 부호 비트 값이 변하지 않을 경우 PROFINET IO 통신이 중단됩니다. 모든 PROFINET IO 스테이션이 켜지고 이상 없이 작동하는지 확인합니다.

충전기

충전기는 EN 61131-2:2007 및 EN 60950-1:2006에 따라 안전 등급 III에 해당합니다.

일본의 경우 주의사항

참고

채널 184 ~ 192에서 접근점과 연결 안 됨

이동 패널 277F IWLAN을 5 GHz 대역에서 작동시키고 접근점과 WLAN 연결에 184 ~ 192 채널 중 하나를 사용하는 경우 때때로 접근점과의 연결이 이루어지지 않을 수 있습니다.

WLAN 채널 184 ~ 192를 사용하지 마십시오. "WLAN 통신 매개변수 지정" 장의 조작 지침을 참고하십시오.

Notes for use in Korea

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

This equipment is Industrial (Class A) electromagnetic wave suitability equipment and seller or user should take notice of it, and this equipment is to be used in the places except for home.

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

This device shall not be used for life-safety related service due to radio interference possibility.

Industrial Security

Siemens는 설비시스템, 시스템, 기계 및 네트워크의 안전한 작동을 지원하는 산업 보안 기능을 갖춘 제품 및 솔루션을 제공합니다.

사이버 위협으로부터 설비시스템, 시스템, 기계 및 네트워크를 보호하기 위해서는 전체적인 첨단 산업 보안 개념을 구현하고 지속적으로 유지 보수해야 합니다. Siemens의 제품 및 솔루션은 이러한 개념의 한 가지 요소만을 구성합니다.

고객의 설비시스템, 시스템, 기계 및 네트워크에 대한 무단 접근을 방지할 책임은 고객에게 있습니다. 시스템, 기계 및 구성요소는 필요한 범위 내에서 적절한 보안 조치(예: 방화벽 및 네트워크 세그멘테이션의 사용)가 마련된 경우에만 엔터프라이즈 네트워크 또는 인터액에 연결되어야 합니다.

또한 적절한 보안 조치에 대한 Siemens의 지침을 고려해야 합니다. 산업 보안에 대한 자세한 내용은 Hotspot-Text (<http://www.siemens.com/industrialsecurity>)를 방문해 확인하시기 바랍니다.

Siemens 제품 및 솔루션은 보안을 강화하기 위해 끊임 없는 개발 과정을 거치고 있습니다. 따라서 다운로드 가능한 경우에는 즉시 제품 업데이트를 적용하고 항상 최신 제품 버전을 사용하는 것이 매우 좋습니다. 더 이상 지원되지 않는 제품 버전을 사용하거나 최신 업데이트를 적용하지 않으면 고객이 사이버 위협에 노출될 가능성이 커질 수 있습니다.

제품 업데이트에 대한 정보를 놓치지 않고 지속적으로 얻으려면 Hotspot-Text (<http://www.siemens.com/industrialsecurity>)에서 Siemens 산업 보안 RSS 피드를 구독하십시오.

타사 소프트웨어 갱신에 대한 책임의 거부

본 제품에는 타사 소프트웨어가 포함되어 있습니다. Siemens AG는 타사 소프트웨어의 갱신/패치가 Siemens 소프트웨어 갱신 서비스 계약의 일부로 배포되었거나 Siemens AG에서 공식 출시한 경우에 한해 이에 대한 보증을 제공합니다. 그 외의 경우에는 갱신/패치 적용 시의 위험을 고객이 부담합니다. 인터넷 소프트웨어 갱신 서비스 (<http://www.automation.siemens.com/mcms/automation-software/en/software-update-service>) 페이지에서 당사 소프트웨어 갱신 서비스에 대한 자세한 정보를 찾아볼 수 있습니다.

관리자 계정 보호에 대한 고지

관리자 권한을 가진 사용자는 시스템에서 광범위한 접근 및 조작 옵션을 이용할 수 있습니다.

따라서 무단 변경을 방지하기 위해 관리자 계정을 보호하기 위한 적합한 안전 조치를 마련하십시오. 이를 위해 일반 작업에 표준 사용자 계정을 할당하고 보안 암호를 이용하십시오. 필요에 따라 보안 정책을 적용하는 등의 부가적 조치를 적용할 수 있습니다.

이동 패널 277 IWLAN V2 및 이동 패널 277F IWLAN(RFID 태그)에 대한 안전 정보

STEP 7에서 구성

| |
|---|
| 경고 |
| 지연으로 평가된 비상 정지 버튼 |
| OB35에 설정된 주기 시간이 PNIO 업데이트 시간보다 짧을 경우 메시지 프레임 고장 및 F_FB_RNG_n의 "E-STOP" 출력 지연 평가 위험이 발생합니다. |
| OB35의 주기 시간을 PNIO 업데이트 시간보다 큰 값으로 설정합니다. |

PROFINET IO

참고

디스플레이 및 터치 스크린의 간헐적인 중지 해결

드물기는 하지만 HMI 디바이스의 디스플레이 및 터치 스크린이 중지되어 더 이상 조작이 불가능한 경우가 발생합니다. 이 문제와는 별도로 PROFINET 인터페이스에 대한 통신, 예를 들어, PROFIsafe 통신이 배경에서 계속됩니다.

해결:

1. HMI 디바이스가 연결되는 기계가 안전한 상태인지 확인하십시오.
2. HMI 디바이스를 다시 시작하십시오. 배터리 격실에서 메인 충전식 배터리를 제거하고 리셋 버튼을 누르십시오(조작 지침 참조).

TIA Portal과 연결 시 디바이스의 PROFIsafe 주소

참고

PROFIsafe 주소 "65535"

TIA Portal과 연결 시 PROFIsafe 주소는 주소 값 "65535"를 HMI 디바이스에 입력함으로써 프로젝트에서 자동으로 적용되지 않습니다.

통신

기능 블록 및 컨트롤러

아래 표는 F-CPU 및 펌웨어 버전에 따라 현재 사용하고 있는 F_FB 버전이 무엇인지를 보여줍니다.

F_FB_MP

| F_FB 버전 | S7-300F/400F | S7-1200F | S7-1500F | 주석 |
|---------|--------------|----------------|----------------|--|
| 1.0 | o | - | - | 원래 사용자 라이브러리에서 전송된 버전 |
| 1.2 | o | - | - | 원래 사용자 라이브러리에서 전송된 버전 |
| 1.3 | x | - | o | TIA Portal에 독점적으로 통합된 첫 번째 버전 |
| 1.4 | x | - | x | TIA V14에서 사용하기 위한, V1.3과 같은 버전 |
| 2.0 | x | - | x | IEC 적합성 확보를 위해 MP_DATA 및 MP_RNG 입력 데이터 유형이 "Word"에서 "Int"로 변경됨 |
| 3.0 | x | x ¹ | x ² | 새로운 컨트롤러 펌웨어 버전과 호환되는 V2.0과 같은 버전 |

x 지원됨

- 지원되지 않음

o 더 이상 지원되지 않음

¹ TIA Portal V14 Update 2와 연결 시 펌웨어 버전 V4.2 이상에 대해 지원됨

² 펌웨어 버전 V2.0 이상에 대해 지원됨

F_FB_RNG_4

| F_FB 버전 | S7-300F/400F | S7-1200F | S7-1500F | 주석 |
|---------|--------------|----------------|----------------|--|
| 1.0 | o | - | - | 원래 사용자 라이브러리에서 전송된 버전 |
| 1.2 | o | - | - | 원래 사용자 라이브러리에서 전송된 버전 |
| 1.3 | x | - | o | TIA Portal에 독점적으로 통합된 첫 번째 버전 |
| 1.4 | x | - | x | TIA V14에서 사용하기 위한, V1.3과 같은 버전 |
| 2.0 | x | - | x | IEC 적합성 확보를 위해 MPn_DATA * 및 MPn_F_KEY * 입력 데이터 유형이 "Word"에서 "Int"로 변경됨 |
| 3.0 | x | x ¹ | x ² | 새로운 컨트롤러 펌웨어 버전과 호환되는 V2.0과 같은 버전 |

x 지원됨

- 지원되지 않음

o 더 이상 지원되지 않음

* MPn은 HMI 디바이스 1 ~ 4에 사용됨

¹ TIA Portal V14 Update 2와 연결 시 펌웨어 버전 V4.2 이상에 대해 지원됨

² 펌웨어 버전 V2.0 이상에 대해 지원됨

F_FB_RNG_16

| F_FB 버전 | S7-300F/400F | S7-1200F | S7-1500F | 주석 |
|---------|--------------|----------|----------------|--|
| 1.0 | o | - | - | 원래 사용자 라이브러리에서 전송된 버전 |
| 1.2 | o | - | - | 원래 사용자 라이브러리에서 전송된 버전 |
| 1.3 | x | - | o | TIA Portal에 독점적으로 통합된 첫 번째 버전 |
| 1.4 | x | - | x | TIA V14에서 사용하기 위한, V1.3과 같은 버전 |
| 2.0 | x | - | x | IEC 적합성 확보를 위해 MPn_DATA * 및 MPn_F_KEY * 입력 데이터 유형이 "Word"에서 "Int"로 변경됨 |
| 3.0 | x | - | x ¹ | 새로운 컨트롤러 펌웨어 버전과 호환되는 V2.0과 같은 버전 |

x 지원됨

- 지원되지 않음

o 더 이상 지원되지 않음

* MPn은 HMI 디바이스 1 ~ 16에 사용됨

¹ 펌웨어 버전 V2.0 이상에 대해 지원됨

참고

TIA V13 SP1의 기능 블록 업그레이드 및 인증

TIA V14로 업그레이드하는 동안 각각의 기능 블록이 이전 버전과 같은 해당 F_FB 버전 1.4 블록으로 대체됩니다. F_FB 버전 V1.4는 S7-1500F와 연결 시 기능 서명이 수정됩니다. TIA V14로 업그레이드의 일환으로 이전 V13 서명이 V14의 기능 서명에 할당된 변환 프로토콜이 제공됩니다. 서명이 수정되었음에도 이 변환 프로토콜을 사용한 기능 블록에 대한 새로운 인증은 필요하지 않습니다. 인터넷 (<https://support.industry.siemens.com/cs/ww/en/view/54110126>)을 이용하여 프로그래밍과 조작 메뉴얼 "SIMATIC 안전 - 구성 및 프로그래밍", 섹션 1.8.1 "STEP 7 안전 V13 SP1에서 V14로 프로젝트 업그레이드"에서 추가 정보를 확인할 수 있습니다.

예를 들어, 컨트롤러의 더 높은 펌웨어 버전과의 호환성 또는 IEC 적합성 확보를 위해 F_FB 버전 2.0 이상이 필요한 경우 기능 블록을 다시 인증해야 합니다.

TIA V13 SP1의 이전 버전에서 기능 블록 업그레이드

TIA 정보 시스템에 기술된 대로 V13 SP1에 대한 이송을 수행하십시오. "TIA V13 SP1에서 기능 블록 업그레이드 및 인증"에 대한 주를 참조하십시오.

F-FB V2.0 이전 버전의 구성

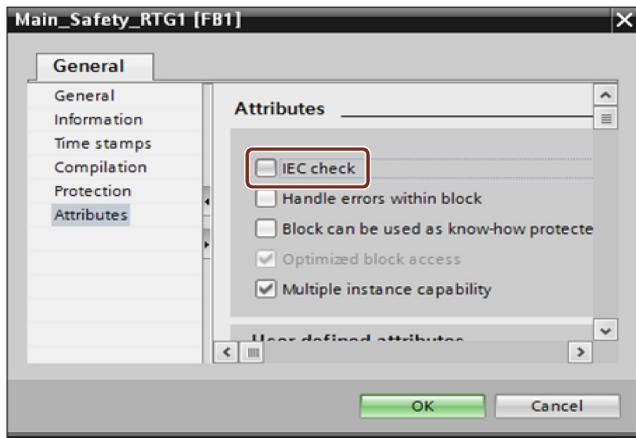
다음 주는 컨피규레이션에 V2.0 이전 버전의 F-FB를 사용하는 경우 적용됩니다.

참고

IEC 점검 사항 비활성화

"IEC 점검 사항" 옵션이 "Main-Safety" 기능 블록에 활성화되어 있는 경우 프로젝트를 컴파일할 수 없습니다.

"Main-Safety" 기능 블록의 속성에서 IEC 점검 사항을 비활성화하십시오. 아래 그림을 참조하십시오.



기능 블록 실행 시간

기능 블록 실행 시간에 대한 정보는 FAQ 27097159에서 확인할 수 있습니다(<https://support.industry.siemens.com/cs/ww/de/view/27097159>).

안전 표준 및 오류 방지 작동

조작 안전에 대한 표준

TÜV

TÜV는 HMI 디바이스가 안전 기능과 관련해 아래 표준의 요구사항을 충족함을 확인합니다.

| 표준 | 제목 | 발행 |
|-----------------|---|--------------|
| DIN EN 60204-1 | 기계류의 안전 - 기계의 전기 장치 – 파트 1: 일반적인 요구사항 | 2006+A1:2009 |
| DIN IEC 62061 | 기계류의 안전 - 안전 관련 전기, 전자, 프로그램 가능 전자 제어 시스템의 기능적 안전 | 2005+A2:2015 |
| IEC 61508-1 ~ 4 | 안전 무결성 레벨 3 | 2010 |
| ISO 13850 | 기계류의 안전 - 비상 정지 - 설계 원칙 | 2015 |
| ISO 13849-1 | 성능 레벨 e 및 범주 4. | 2015 |

오류 방지 작동에 대한 기술 제원

- IEC 61508 준수

| | |
|------------------|--------------------------------------|
| 하드웨어 아키텍처 | 증복 1oo2 |
| 요청 비율 | 높은 수요 모드 |
| 시간 당 위험 실패율(PFH) | $< 1.00 \times 10^{-10} \text{ 1/h}$ |
| 요청 시 위험 실패율(PFD) | $< 1.70 \times 10^{-6}$ |
| 달성 가능한 최대 안전 수준 | SIL3 |
| 사용 수명 | 10년 |

- IEC 13849-1에 따름

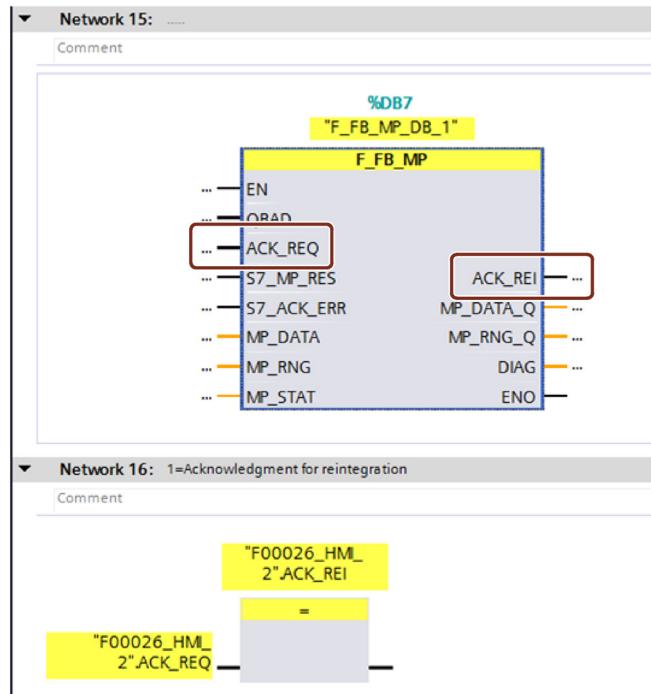
| | |
|------------------|-----|
| 실패할 평균 시간(MTTFd) | 89년 |
| 진단 범위 | 높음 |
| 성능 수준 | e |
| 안전 범주 | 4 |

TIA V13 SP1 포함 디바이스 사용에 대한 주

PROFIsafe 통신

HMI 디바이스의 전원을 커거나 F-CPU에 대한 PROFIsafe 연결 종단 후 연결이 자동으로 이루어지지 않는 경우 F_FB_MP의 출력 매개변수 ACK_REQ를 다음과 같이 상호 연결해야 합니다. "ACK_REQ = ACK_REQ", 오른쪽 예를 참조하십시오.

네트워크 16의 실행 시간은 기능 블록의 실행 시간에 포함되어 있지 않습니다.



스페인어 조작 지침

비상 정지 버튼 활성화

일반 규칙: PROFIsafe 통신이 연결되자마자 비상 정지 버튼이 활성화되므로 오류 방지 HMI 디바이스가 기계에 등록되었는지에 영향을 받지 않습니다.

이러한 이유로 "이동 패널 277 IWLAN V2, 이동 패널 277F IWLAN V2, 이동 패널 277F IWLAN (RFID 태그)", 에디션 01/2011의 스페인어 조작 지침에서 다음 두 가지 진술은 아래와 같아야 합니다.

- 섹션 1.15, 42페이지, 첫 번째 목록 항목: "El siguiente comportamiento de desconexión de la instalación es válido independientemente de si el panel de operador ha iniciado sesión en una máquina o no."
- 섹션 2.6, 52페이지, 두 번째 문장: "El pulsador de parada de emergencia es efectivo en una WLAN independiente de si el panel de operador ha iniciado sesión en una máquina o no."

WLAN 통신 매개 변수화 - 원격 액세스

웹 기반 관리를 수행하여 직접 HMI 디바이스에서 또는 웹 브라우저나 Telnet을 통해 WLAN 통신을 매개 변수화 할 수 있습니다.

웹 브라우저를 이용한 웹 기반 관리

포트 34965를 통해 표준 웹 브라우저를 이용하여 웹 기반 관리에 연결합니다.
구문: "http://<IP-Adresse>:34965"

예: HMI 디바이스의 IP 주소가 "192.168.1.1"일 경우 웹 브라우저의 주소 표시줄에 다음 내용을 입력합니다.
"http://192.168.1.1:34965"

Telnet을 통한 웹 기반 관리

Telnet을 통해서도 WLAN을 구성할 수 있습니다. 포트 34966을 통해 이 서비스에 연결할 수 있습니다. 액세스 데이터는 웹 액세스 데이터에 해당합니다.

표준 및 승인

이 부분에는 무선 시스템에 대한 표준 및 국가별 승인에 대한 중요 정보가 포함되어 있습니다.

참고

다음 개요는 이용할 수 있는 승인을 설명한 것입니다.

HMI 디바이스는 후면 패널의 라벨에 표시된 바와 같이 인증되었습니다.

CE 승인



Siemens에 의해 유통 중인 버전의 HMI 디바이스는 다음 유럽 지침의 규제를 준수합니다.

99/5/EC

무선 기기 및 통신 단말기기에 관한 유럽 위원회 지침 및 적합성 상호 인증.

지침의 기본 요건에 대한 호환성은 다음 표준에 대한 준수로 확인됩니다.

| | |
|----------------------------|---|
| EN 60950 | 정보 기술 장비 안전 |
| EN 301489-1 | 무선 기기 및 서비스의 전자기 호환성 |
| EN 301489-17 | 광대역 데이터 전송 시스템 및 로컬 HIPERLAN(high-performance radio networks)에서 운용되는 장비를 위한 특정 요구사항 |
| EN 300328 | ERM(전자파 적합성 및 무선 스펙트럼, Electromagnetic compatibility and Radio spectrum Matters), 광대역 전송 시스템, 2.4 GHz ISM 대역에서 광대역 변조 기술을 사용한 데이터 전송 장비 |
| EN 300440-1 EN 300440-2 | 전자파 적합성 및 무선 스펙트럼(ERM) - 근거리 통신기기 - 1GHz ~ 40GHz 주파수 범위에서 사용되는 무선 기기. |
| EN 301893 | 광대역 무선 접근 네트워크(BRAN) - 5 GHz 고성능 RLAN |
| EN 50371 | 저전력 전기 및 전자 기구의 전자기장에 대한 인체 노출과 관련된 기본 제한 준수(10 MHz ~ 300 GHz) |
| 1999/519/EC | 전자기장에 대한 일반 대중의 노출 제한에 관한 위원회 권고(0Hz ~ 300GHz) |

시스템에 연결된 디바이스는 관련 안전 규정에 부합해야 합니다.

EU 표준 부합 공표문

EU 적합성 선언을 해당 관청과 관련하여 다음 주소에서 계속 제공 받을 수 있습니다.

Siemens AG
Digital Factory
Factory Automation
DF FA AS SYS
Postfach 1963
D-92209 Amberg

이 선언은 위에 언급된 지침의 준수를 인증하지만 특정 속성을 보증하지는 않습니다.

EC 적합성 선언에 대한 내용을 다운로드하려면 다음 위치로 이동하십시오.

이동 패널 277(F) IWLAN 인증서 (<https://support.industry.siemens.com/cs/ww/en/ps/14751/cert>)

UL 승인



Underwriters Laboratories Inc.

- UL 60950-1 - 정보 기술 장비 - 안전
파트 1: 일반 요구사항 – 2판 – 발행일 2007/03/27
- CSA C22.2 No. 60950-1 (제2판) - 정보 기술 장비 - 안전
파트 1: 일반 요구사항 – 2판 – 발행일 2007/03/27

승인 사항은 배터리로 작동되거나 충전기에 고정되어 있는 경우에만 유효합니다.

Approval according to FCC

This device complies with Part 15 of the FCC Rules

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation.

IEEE802.11b or g operation of this product in the USA is firmware-limited to channels 1 through 11.

Notice

Changes or modifications made to this equipment not expressly approved by SIEMENS may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Notice

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Professional Installation Notice:

To comply with FCC Part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

Within the 5.15-5.25 GHz band, this device is only for indoor use operations to reduce any potential for harmful interference to co-channel MSS operations.

RSS-210 of Industry Canada

"Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

"This device has been designed to operate with internal antennas with a maximum gain of 2 dBi and an antenna impedance of 50 Ohms. Other antennas are strictly prohibited for use with this device."

"To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication."

That the device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems."

"Users should also be cautioned to take note that high power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices."

국가 승인

참고

다음 개요는 다양한 많은 국가의 무선 승인을 나타냅니다.

HMI 디바이스는 후면 패널의 라벨에 표시된 바와 같이 인증되었습니다.

| Country | Identification | Approval granted | Country | Identification | Approval granted | Country | Identification | Approval granted |
|----------------------|----------------|------------------|-----------------|----------------|------------------|--------------------------|----------------|------------------|
| Australia | | ✓ | Hong Kong | | | Portugal | | ✓ |
| Austria | | ✓ | Hungary | | ✓ | Romania | | ✓ |
| Bahrain ¹ | | ✓ | Ireland | | ✓ | Russia | | |
| Belgium | | ✓ | Iceland | | ✓ | Singapore | | |
| Bulgaria | | ✓ | Italy | | ✓ | Slovakia | | ✓ |
| Canada | | ✓ | Japan | | ✓ | Slovenia | | ✓ |
| China | 電訊管理局 | ✓ | Kuwait | | | Spain | | ✓ |
| Cyprus | | ✓ | Latvia | | ✓ | South Africa | | ✓ |
| Czech Republic | | ✓ | Liechtenstein | | ✓ | South Korea | | ✓ |
| Denmark | | ✓ | Lithuania | | ✓ | Sweden | | ✓ |
| Estonia | | ✓ | Luxembourg | | ✓ | Switzerland | | ✓ |
| Finland | | ✓ | Malaysia | | | Taiwan | | ✓ |
| France | | ✓ | Malta | | ✓ | Turkey | | ✓ |
| Germany | | ✓ | The Netherlands | | ✓ | Ukraine | | |
| Great Britain | | ✓ | Norway | | ✓ | United States of America | | ✓ |
| Greece | | ✓ | Poland | | ✓ | | | |

¹ 바레인에서 디바이스를 작동하려면 다음 주소에 등록해야 합니다.

TRA Bahrain (<http://www.tra.org.bh/en/index>)