

SIEMENS



SIMATIC

USB-Prommer

Commissioning manual

Edition

04/2020

Answers for industry.

SIEMENS

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Commissioning Manual

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Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Usage and Function

Scope of delivery

With your SIMATIC USB-Prommer, you will receive:

- A "SIMATIC USB-Prommer" CD with software and documentation
- A SIMATIC S5 programming adapter
- A USB cable
- A plug-in power supply with primary connection adapter for Europe and the United States
- A carrying bag

Software requirements

The following software must be installed on your PC for working with the SIMATIC USB-Prommer:

- The SIMATIC software STEP 5 V7.2 or STEP 7 V5.1+SP2 or later.
- Windows 98SE, Windows Me, Windows 2000, Windows XP, Windows Server 2003 Standard Edition, Windows Vista, Windows 7.8 or Windows 10 operating system.

Hardware requirement

You will need a PC with a USB port.

Usage of the SIMATIC USB-Prommer


Together with the associated SIMATIC software, you can use the SIMATIC USB-Prommer to read and program SIMATIC S5 memory modules, SIMATIC Memory Cards and SIMATIC Micro Memory Cards. For editing SIMATIC S5 EPROM modules, the SIMATIC S5 programming adapter must be plugged in. The adapter is included in the product package.

The SIMATIC USB-Prommer is compatible with USB V1.1 and meets the specifications for a "high-powered" USB device.

The SIMATIC USB-Prommer supports power-saving mode (Hibernate mode).

Function

The SIMATIC USB-Prommer comes equipped with

- SIMATIC Micro Memory Card interface: 
- SIMATIC S5/S7 Memory Card interface: MEM-CARD

The SIMATIC USB-Prommer is connected to the PC via the USB port.

If you operate the SIMATIC USB-Prommer without plug-in power supply, you can only edit SIMATIC Micro Memory Cards.

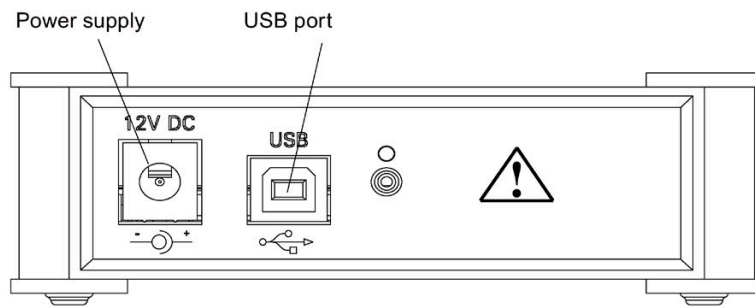
To edit S5/S7 Memory Cards and S5 EPROM modules, the plug-in power supply must always be plugged in.

Hardware Installation

Rear of the device


On the device rear, you will find:

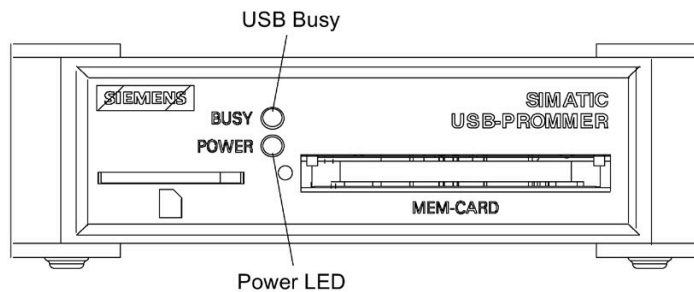
- The power supply connector for connection of the plug-in power supply
- The USB port type B for connection to the PC



Front of the device

On the device front, you will find:

- SIMATIC Micro Memory Card interface: 
- SIMATIC S5/S7 Memory Card interface: MEM-CARD
- Two operating state displays
 - BUSY
 - POWER



Operating state displays

Name	Color	Meaning
BUSY	Green	Lights up when a programming interface is active.
POWER	Green *	Plug-in power supply plugged in (device power supply from USB port and plug-in power supply). Flashes when an error has occurred.
	Yellow	Only USB cable is plugged in (power supply from the USB port). Flashes when a hardware fault has occurred.

* The Power LED will not light up in green until the SIMATIC USB-Prommer has been connected to a switched-on PC with the USB cable and the plug-in power supply is plugged in.

If neither the POWER LED nor the BUSY LED light up when the USB cable is plugged in, the SIMATIC USB-Prommer is in power-saving mode (Hibernate mode) or the PC on which the device is operated is switched off.

Power supply

The SIMATIC USB-Prommer is supplied by the PC via the USB cable (POWER LED lights up in yellow). In this operating mode, i.e. without plug-in power supply, the SIMATIC USB-Prommer can only edit SIMATIC Micro Memory Cards (MMC).

If you want to edit SIMATIC S7 Memory Cards, SIMATIC S5 EPROM modules or SIMATIC S5 Memory Cards, you must also supply the SIMATIC USB-Prommer with power via the plug-in power supply (POWER-LED lights up in green).

The supplied power supply is a wide-range power supply; it can be adapted to fit the respective power outlet of a specific country, e.g. the United States, by using an adapter.

Connecting the power supply

Proceed as follows:

1. Plug in the 12 V DC power supply cable of the plug-in power supply to the 12 V DC power supply input of the SIMATIC USB-Prommer.
2. Configure your plug-in power supply with the power outlet adapters for a specific country. The scope of delivery includes an adapter for the United States and Europe. The power outlet adapter is fastened by pushing it onto the plug-in power supply.
3. Connect the plug-in power supply to an outlet of your 230 V AC or 115 V AC power supply.

NOTICE
LEDs
The device is connected properly when the green POWER LED on the SIMATIC USB-Prommer lights up. If the contacts of the plug-in power supply get dirty, problem-free functioning of the prommer is no longer guaranteed. If the SIMATIC USB-Prommer has not yet been connected to the switched-on PC with the USB cable, the LEDs remain unlit.

 **WARNING**

Plug-in power supply

When operating the SIMATIC USB-Prommer with an external power supply, you may only use the supplied plug-in power supply.

 **CAUTION**

Plug-in power supply

A power source with limited power is required for the operation of the SIMATIC USB-Prommer (USA/Canada: NEC Class 2). The supplied plug-in power supply meets these requirements.

Software Installation

The installation of the SIMATIC USB-Prommer software starts automatically after inserting the product CD.

If this function is switched off, follow these steps:

1. Insert your SIMATIC USB-Prommer product CD into the CD-ROM drive
2. Open the root directory in this drive.
3. Start the setup program with a double-click on the "setup.exe" file.

The setup program will guide you through the entire installation. Observe the notes regarding the installation and use of the SIMATIC USB-Prommer software in the Readme file that is located in the root directory of the CD.

Connecting to the PC


1. Insert the supplied USB cable into a USB port on your PC.
2. Insert the other end of the USB cable into the USB port of the SIMATIC USB-Prommer.
3. During initial operation of the SIMATIC USB-Prommer, you must set the programming interface to "External prommer" at the "USB" port in the Control Panel with the "Memory Card Parameter Assignment" panel.

When you select the setting "Detect USB prommer automatically", the connection of the SIMATIC USB-Prommer to the PC is detected automatically.

NOTICE
USB cable Connect the SIMATIC USB-Prommer to the PC only with the supplied USB cable.

Working with the SIMATIC USB-Prommer

Requirement: The SIMATIC USB-Prommer is connected to your PC as described above.

1. Insert the desired storage medium:
 - Micro Memory Cards into the Micro Memory Card interface 
 - SIMATIC S5/S7 Memory Cards into the MEM-CARD interface
 - S5 EPROM/EEPROM modules using the SIMATIC S5 programming adapter into the MEM-CARD interface
2. Connect the supplied plug-in power supply when you are using S5/S7 Memory Cards or S5 EPROM modules.
3. Start in the SIMATIC STEP 7 software or the SIMATIC STEP 5 software.
4. Make sure that the programming interface of your SIMATIC software is set to "External prommer" at the "USB" port with the "Memory Card Parameter Assignment" panel.
5. Edit your storage medium.
6. Remove the storage medium when you are done with editing.

NOTICE

Programming

The BUSY LED lights up during programming.

Do not unplug the memory module, the USB cable or the plug-in power supply during programming.

WARNING

Simultaneous operation

Simultaneous operation of SIMATIC S5 modules, SIMATIC Memory Cards and SIMATIC Micro Memory Cards is not possible. When SIMATIC Micro Memory Cards and SIMATIC S5 or S7 Memory Cards are plugged in, the SIMATIC S5/S7 Memory Cards are preferred.

Firmware Update

The firmware of the SIMATIC USB-Prommer can be updated later, for example, if it was changed as part of a function extension.

You can find the most recent firmware and the firmware update tool on the Internet at:
<http://www.siemens.com/automation/service&support>
(<http://www.siemens.com/automation/service&support>)

Follow these steps when updating the firmware:

1. Search for the term "USB-Prommer" in the product support.
2. Download the self-extracting exe file of the offered firmware and the firmware tool to your PC.
3. Unzip the files to a local drive and update the firmware on your SIMATIC USB-Prommer by following the instructions of the firmware update tool.
4. Also read the Readme file in the catalog of the firmware update tool. There you will find the notes on the installation and use of the new firmware.

Fault Diagnostics

You can remedy simple faults that you can diagnose yourself as follows:

Fault/Cause	Remedy
POWER LED does not light up in yellow	
<ul style="list-style-type: none"> • USB cable not plugged in • PC is switched off • PC and SIMATIC USB-Prommer are in power-saving mode (Hibernate mode). • SIMATIC USB-Prommer is not recognized by the PC. • SIMATIC Memory Cards and SIMATIC Micro Memory Cards cannot be edited. • Hardware fault exists 	<ul style="list-style-type: none"> • Plug in USB cable • Switch on the PC • Permissible operating mode • Installing drivers • Check the version of the SIMATIC STEP 7 software • Contact Customer Support or your Siemens contact person.
POWER LED does not light up in green	
<ul style="list-style-type: none"> • USB cable not plugged in • Plug-in power supply not plugged in or defective 	<ul style="list-style-type: none"> • Plug in USB cable • Plug in or replace plug-in power supply
Continuous flashing at the POWER LED	
<ul style="list-style-type: none"> • Hardware fault exists 	<ul style="list-style-type: none"> • If the POWER LED of the device continues flashing after the USB cable and the plug-in power supply have been plugged in repeatedly, the device is defective and must be replaced. <p>Contact Customer Support or your Siemens contact person.</p>

Specifications

Plug-in power supply	
Type number	FW8001/12
Supply voltage	100 – 240 V AC (+10%, -15%)
Frequency of the supply voltage	50/60 Hz (47 to 63 Hz)
Max. power consumption	18 W
Max. current output	12 V DC, 1.5 A
Primary adapter EURO	EURO connector, according to VDE 0620, part 101 or IEC 83/C5
Primary adapter USA	USA connector, according to ANSI C73.10 or IEC 8/AI-15
SIMATIC USB-Prommer	
Order number	6ES7792-0AA00-0XA0
Dimensions	Approx. 172 x 121 x 40 mm
Weight	Approx. 400 g
Supply voltage	12 V DC, 1.25 A
Max. power consumption	15 W
Safety	
Protection class	Protection class I in accordance with VDE 0106 Part 1: (IEC 60536)
Safety specifications	IEC 62368-1/EN 62368-1 UL 62368-1 Second Edition CAN/CSA C22.2 No. 62368-1-14 Second Edition
Electromagnetic compatibility (EMC)	
Emitted interference	Limit value class B according to EN55032
Immunity to line-borne interference on supply lines	±2 kV (according to IEC 61000-4-4; burst) ±1 kV (according to IEC 61000-4-5, surge symmetrical) ±2 kV (according to IEC 61000-4-5, surge asymmetrical)
Noise immunity on signal lines	±1 kV (according to IEC 61000-4-4; burst; length < 3 m) ±2 kV (according to IEC 61000-4-4; burst; length > 3 m)
Interference immunity against static electricity (ESD)	±4 kV, contact discharge (according to IEC 61000-4-2) ±8 kV, air discharge (according to IEC 61000-4-2)
Immunity to RF interference	10 V/m 80 MHz – 2 GHz, 80% AM 1 kHz (according to IEC 61000-4-3) 3 V/m 2 – 6 GHz, 80% AM 1 kHz (according to IEC 61000-4-3)
RF current	10 V 10 kHz – 80 MHz, 80% AM 1 kHz (according to IEC 61000-4-6)
Magnetic field	30 A/m 50 Hz (according to IEC 61000-4-8)

Climatic conditions	
Temperature <ul style="list-style-type: none"> • Operation • Storage/transportation 	tested according to DIN IEC0 60068-2-2, DIN IEC 60068-2-1, <ul style="list-style-type: none"> • +5 °C to +40 °C, temperature change max. 10 K/h • -20 °C to +60 °C, temperature change max. 20 K/h
Relative humidity <ul style="list-style-type: none"> • Operation • Storage/transportation 	tested according to DIN IEC0 60068-2-30, DIN IEC 60068-2-14 <ul style="list-style-type: none"> • 5% to 80% at 25 °C (no condensation) • 5% to 95% at 25 °C (no condensation)
Mechanical ambient conditions	
Vibration <ul style="list-style-type: none"> • Operation • Storage/transportation 	tested according to DIN IEC 60068-2-6 <ul style="list-style-type: none"> • 10 to 58 Hz: Amplitude 0.075 mm, 58 Hz to 500 Hz: Acceleration 9.8 m/s • 5 to 9 Hz: Amplitude 3.5 mm, 9 Hz to 500 Hz: Acceleration 9.8 m/s
Resistance to shock <ul style="list-style-type: none"> • Operation • Storage/transportation 	tested according to DIN IEC 60068-2-27 and DIN IEC 60068-2-29 <ul style="list-style-type: none"> • 50 m/s, 30 ms, 100 shocks • 250 m/s, 6 ms, 1000 shocks

Additional Support and Sales Information

Additional support

Your local Siemens representative will be pleased to provide answers to any open issue relating to the use of products described in this manual.

Find your contact partner at:

<http://www.siemens.com/automation/partner> (<http://www.siemens.com/automation/partner>)

A guide to the technical documentation of the various SIMATIC products and systems is available at:

<http://www.siemens.com/simatic-tech-docu-portal>
(<http://www.siemens.de/simatic-tech-doku-portal>)

You can find the online catalog and order system at:

<http://mall.automation.siemens.com> (<http://mall.automation.siemens.com>)

Training center

To familiarize you with the SIMATIC S7 automation system, we offer a variety of courses. Contact your regional training center or the central training center in Nuremberg, Germany.

Internet: <http://www.sitrain.com> (<http://www.sitrain.com>)

Siemens Industry Online Support

You can obtain up-to-date information quickly and easily on the following topics:

- **Product Support**

All information and extensive know-how about your product, technical specifications, FAQs, certificates, downloads and manuals.

- **Application examples**

Tools and examples to solve your automation task - as well as function blocks, performance statements and videos.

- **Services**

Information on Industry Services, Field Services, Technical Support, Spare Parts and Training.

- **Forums**

For answers and solutions pertaining to automation engineering.

- **mySupport**

Your personal work area in Siemens Industry Online Support for notifications, support requests and customizable documents.

This information is available from Siemens Industry Online Support on the Internet (<http://www.siemens.com/automation/service&support>).

Certificates, Guidelines and Declarations

CE approval



EMC directive

The following applies to the SIMATIC product described in this documentation:

This product meets the requirements of EU Directive "2014/30/EU, Electromagnetic Compatibility" and is designed for operation in the following fields of application according to the CE marking:

Fields of application	Requirement for	
	Emitted interference	Immunity to interferences
Residential, business and commercial operations, and small businesses	EN 61000-6-3	EN 61000-6-1
Industry	EN 61000-6-4	EN 61000-6-2

In addition, the standards EN 61000-3-2 (harmonic currents) and EN 61000-3-3 (voltage fluctuation and flicker) are observed.

Low-voltage directive

This product meets the requirements of EU Directive 2014/35/EU "Low-Voltage Directive". Conformance with this standard has been verified according to EN62368-1.

RoHs directive

This product meets the requirements of RoHS Directive 2011/65/EU "Restriction of the use of certain hazardous substances in electrical and electronic equipment". Compliance with the directive has been reviewed according to the following standard: EN 50581.

Declaration of conformity

The EU declarations of conformity and the corresponding documentation are made available to authorities in accordance with the EU directives stated above by:

Siemens AG
Automation and Drives
A&D AS RD ST Type Test
PO Box 1963
D-92209 Amberg
Tel.: +49 9621 80 3283
Fax: +49 9621 80 3278

Observing installation guidelines

The installation guidelines and safety instructions given in this description have to be noted during commissioning and operation.

Connecting I/Os

Noise immunity requirements according to EN 61000–6–2 are met if the connected PC is suitable for industrial applications.

Approvals for the USA, Canada and Australia

The following approvals regarding product safety and EMC are in effect for the United States, Canada and Australia:

Product safety

One of the following markings on a device is indicative of the corresponding approval:



The following approvals are available for the device:

- Underwriters Laboratories (UL) in accordance with Standard UL 62368-1 Second Edition
- Canadian National Standard CAN/CSA-C22.2 No. 62368-1 Second Edition

EMC:

USA

Federal Communications Commission Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Shielded Cables

Shielded cables must be used with this equipment to maintain compliance with FCC regulations.

Modifications

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Conditions of Operations

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 received, including interference that may cause undesired operation.

Canada

Canadian Notice

This Class B digital apparatus complies with Canadian ICES-003.

Avis Canadien

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

RCM AUSTRALIA / NEW ZEALAND



This product meets the requirements of the standard EN 61000-6-3 Generic standards - Emission standard for residential, commercial and light-industrial environments.

This product meets the requirements of the standard EN 61000-6-3 Generic standards - Emission standard for residential, commercial and light-industrial environments.