

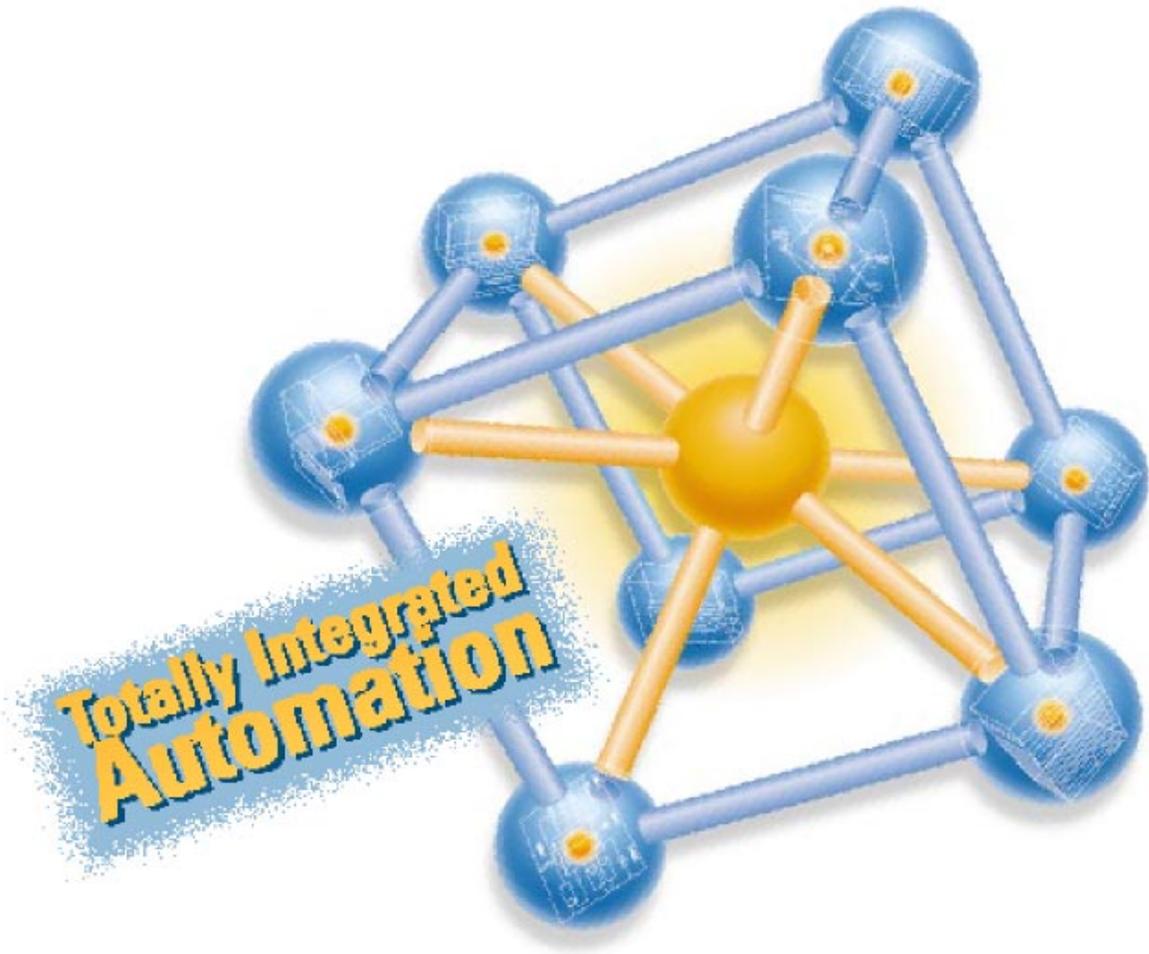
SIEMENS

SIMATIC Field PG

Getting Started

Edition 01/2002

First Steps in Commissioning



Safety guidelines

This Getting Started contains notices intended to ensure personal safety, as well as to protect the products and connected equipment against damage. These notices are highlighted by the symbols shown below and graded according to severity by the following texts:



Danger

indicates that death, severe personal injury or substantial property damage will result if proper precautions are not taken.



Warning

indicates that death, severe personal injury or substantial property damage can result if proper precautions are not taken.



Caution

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

Caution

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

Notice

draws your attention to particularly important information on the product, handling the product, or to a particular part of the documentation.

Qualified Personnel

Repair, maintenance and servicing of device only to be carried out by qualified personnel. Qualified persons are defined as persons who are authorized to commission, to ground, and to tag circuits, equipment, and systems in accordance with established safety practices and standards.

Correct Usage

Note the following:



Warning

This device and its components may only be used for the applications described in the catalog or the technical description, and only in connection with devices or components from other manufacturers which have been approved or recommended by Siemens.

This product can only function correctly and safely if it is transported, stored, set up, and installed correctly, and operated and maintained as recommended.

Trademarks

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Disclaimer of Liability

We have checked the contents of this manual for agreement with the hardware and software described. Since deviations cannot be precluded entirely, we cannot guarantee full agreement. However, the data in this manual are reviewed regularly and any necessary corrections included in subsequent editions. Suggestions for improvement are welcomed.

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Technical data subject to change.

This Getting Started offers you step by step instructions on how to install and start SIMATIC Field PG.

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If you are confronted with a technical problem you can find helpful information in the Chapter *Error diagnostics*. The references to the manual are intended to give you an initial overview of the information in the manual.

Electronic Manual

You can find the electronic manual on the included CD "Backup PG" under the filename "HBFieldPG_b.pdf". This manual offers information on many useful topics, for example, on optional hardware expansion, modification of the device configuration and technical data.

To read or to print out the manual you need the Adobe Acrobat Reader. The Adobe software is preinstalled on the PC as well as on the CD "Backup PG".

The manual also includes declarations of conformity with regard to safety and EMC requirements.



Warning

To avoid damage to assets and for the sake of your own personal safety, please take note of the information on safety in this user guide and in the electronic manual. These notes are highlighted with triangular warning signs. They are presented in different ways and in accordance with the degree of risk.

Hotline Services

SIMATIC Hotline open round the clock, worldwide:

| | | |
|---|--|---|
| <p>Worldwide (Nuremberg) Technical Support (Free Contact) Local time: Mon.-Fri. 7:00 to 17:00 Phone: +49 (180) 5050-222 Fax: +49 (180) 5050-223 E-Mail: techsupport@ad.siemens.de GMT: +1:00</p> | <p>Worldwide (Nuremberg) Technical Support (fee based, only with SIMATIC Card) Local time: Mon. to Fri. 0:00 to 24:00 Phone: +49 (911) 895-7777 Fax: +49 (911) 895-7001 GMT: +01:00</p> | |
| <p>Europe / Africa (Nuremberg) Authorization Local time: Mon.-Fri. 7:00 to 17:00 Phone: +49 (911) 895-7200 Fax: +49 (911) 895-7201 E-Mail: authorization@nbgm.siemens.de GMT: +1:00</p> | <p>U.S.A (Johnson City) Technical Support and Authorization Local time: Mon.-Fri. 8:00 to 19:00 Phone: +1 423 461-2522 Fax: +1 423 461-2289 E-Mail: simatic.hotline@sea.siemens.com GMT: -5:00</p> | <p>Asia / Australia (Singapore) Technical Support and Authorization Local time: Mon.-Fri. 8:30 to 17:30 Phone: +65 740-7000 Fax: +65 740-7001 E-Mail: simatic.hotline@sae.siemens.com.sg GMT: +8:00</p> |
| <p>The languages of the SIMATIC Hotlines are generally German and English, in addition, French, Italian and Spanish are spoken on the authorization hotline.</p> | | |

Unpacking the SIMATIC Field PG

Unpack your SIMATIC Field PG as follows:

1. Remove the packing.
2. Do not throw the original packing away. Keep it in case you have to transport the unit again sometime in the future.

Checking the Contents

3. Check with the packing list to make sure no components are missing.
4. Check the packing and its contents for any shipping or transport damage.
5. Please inform your local dealer of any shipping or transport damages and of outstanding items indicated on the packing list.

Entering the Serial number (F-No.) and the Ethernet address

6. Enter the **serial number** and the **Ethernet address** of your programming device in the table below. You can find the serial number on the type label attached to the base of the device. The Ethernet address can be found in the BIOS setup settings in the main menu under the 'Hardware Options' function.

If a PC is stolen and subsequently submitted for repair, the repair center will be able to identify it by the F-No.

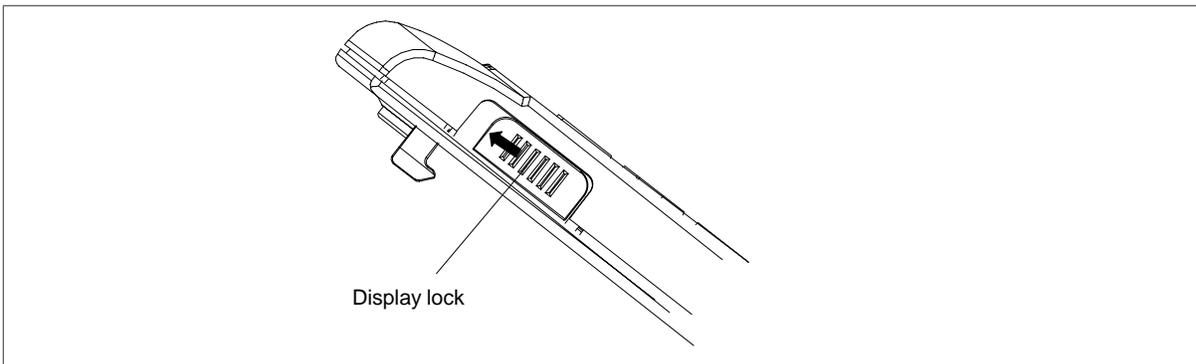
Entering the Microsoft Windows "Product Key" from the "Certificate of Authenticity"

7. Enter the Microsoft Windows "Product Key" from the "Certificate of Authenticity" (COA) in the table. You will find the "Product Key" on the base of the device. You need the Windows "Product Key" if you want to reinstall the operating system.

| | |
|-------------------------------|--|
| F-No. | |
| Order No. | |
| Microsoft Windows Product Key | |
| Ethernet Address | |

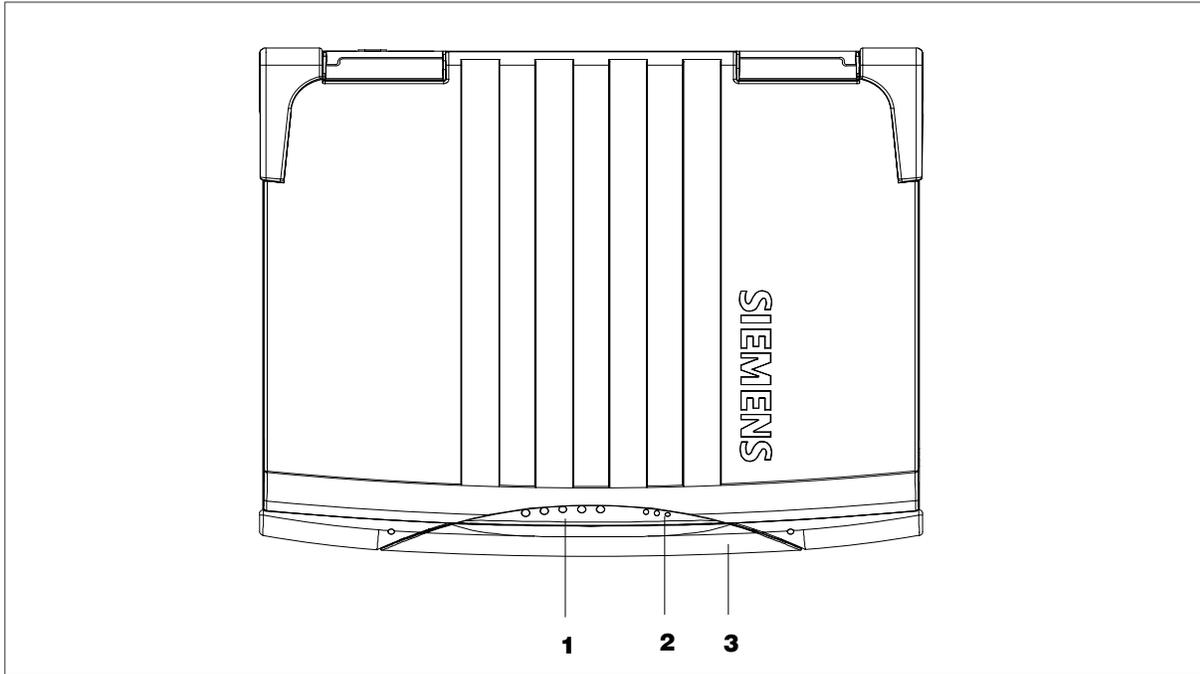
Installing the SIMATIC Field PG

1. Set up the SIMATIC Field PG to ensure safety and a comfortable posture.
2. Pull the slide lock at the side of the display forward to open the display.
3. Open the display towards the top and adjust it to a comfortable angle of vision. The display can be adjusted within any inclination angle from 0 to 180°.



Devices of the SIMATIC Field PG

View with closed display



1 System-LEDs

The system LEDs (battery status  , device  , drives  , MPI/DP  and Memory Card ) indicate the operate state of the rechargeable battery, unit, drives, MPI/DP and Memory Card interface.

These LEDs are also visible when the display is closed. The drive access displays are arranged on the right hand side of the corresponding drives.

For detailed information on the LED displays refer to Chapter 2.4 of the electronic manual.

2 Keyboard-LEDs

The keyboard LEDs display the current status of the shift keys Num Lock  , Caps Lock  and Scroll

Lock  . When the unit is powered up, the displays of these keys are actuated briefly. The keyboard is ready for operation.

3 Device handle

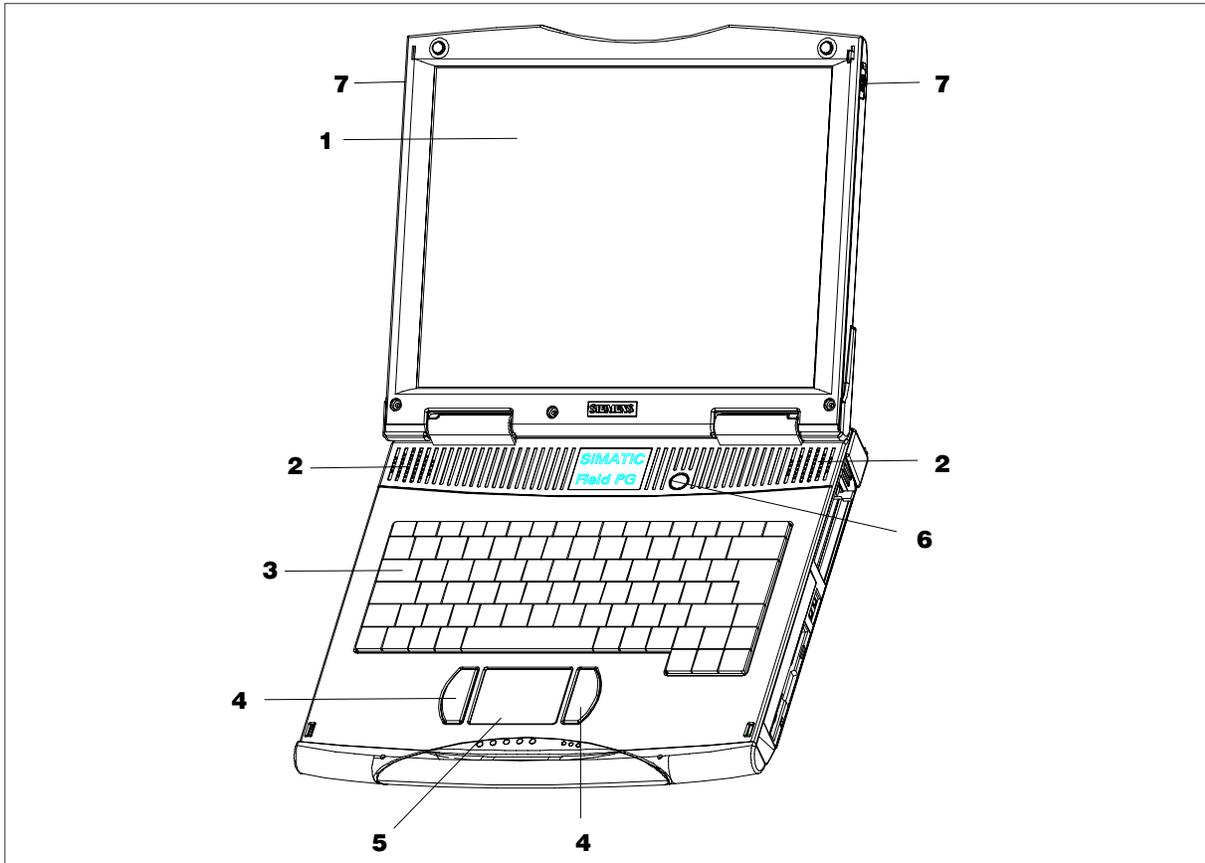
Folding handle for transporting the device.



Caution

Always stand the PG on its base. If you place it down on the interface side there is a risk that it will fall over and damage sensitive components of the unit.

Front view with open display



1 Display

The Field PG is equipped with a 14.1" TFT display with a resolution of 1024 x 768 pixels and up to 256,000 colors.

2 Stereo speaker

The speaker outputs system alarm signals and audio signals generated by the software. Loudness is adjusted via speaker icon in the task bar or in the Windows Start menu via [Programs > Accessories > Multimedia > Loudness](#).

3 Keyboard

The keyboard is split into three key areas: the alphanumerical keyboard with special keys, the function keys and the control keys.

4 Mouse buttons

You can use the left or right mouse button to select menu items or process text or graphic objects after having marked the respective object.

5 Touchpad

The Touchpad has a pressure sensitive surface for precise mouse pointer positioning.

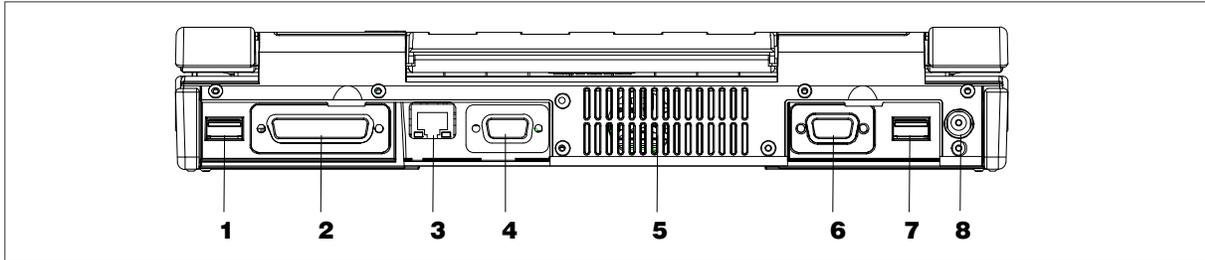
6 On/Off-button (Power Button)

Use the On/Off pushbutton to power up the Field PG (into active state) or to switch it from active to inactive state (Off, Standby or Hibernate). The Power Button can be parameterized under Windows. The Windows NT versions do not support this power management. *Refer to Chapter 2.5 of the electronic manual.*

7 Display-interlock

The display unit is connected to the base unit with two locks. The slide interlock is mounted at the side of the display unit.

Rear view



1 USB

Universal Serial Bus connector. You can use the USB port to connect external devices, for example, CD drives, printers, modems as well as a mouse and keyboard. The Windows NT versions only support mouse and keyboard.

2 COM1 V.24 /MODEM /AG

The COM 1(TTY) interface is used to connect, for example, S5 automation units (AG). The supplied "Serial Port Adaptors D9/D25" can be used to convert the interface into a 9-pole standard V.24 interface for connecting serial interface devices such as a modem, mouse or printer. *Refer to Chapter 3.10 of the electronic manual.*

3 Ethernet

RJ45 Ethernet connector. Ethernet is a local area network with a bus structure for data communication with a data transfer rate of 10 or 100 megabit per second (Mbps).

4 MPI/DP Multipoint Interface

The MPI/DP interface is isolated from line potential. You can use it to connect the SIMATIC Field PG to an S7 automation system or to a PROFIBUS network. *Refer to Chapter 3.11 of the electronic manual.*

5 Air venting slots

Here is the ventiduct.



Caution

The ventiducts for incoming and outgoing air must not be obstructed. Otherwise, there is a risk of overheating.

6 VGA

You can connect an appropriate external monitor to this connector.

Caution

Make sure the monitor can handle the resolution and refresh rate settings. Otherwise, it can result in damage.

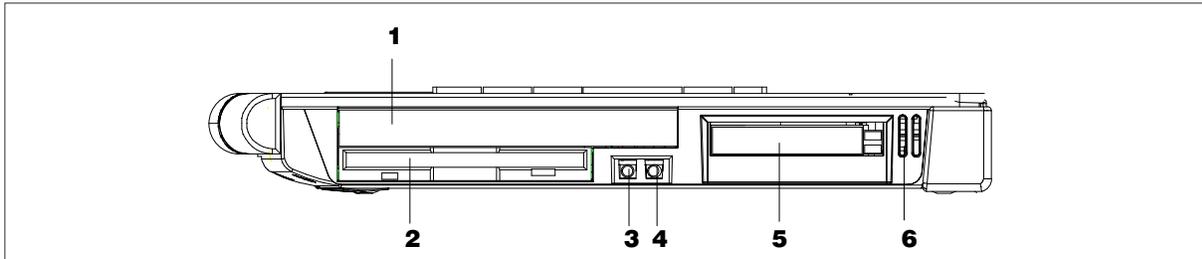
7 USB

Second USB port.

8 DC-In 17.5 V

Socket for the DC output plug of the AC adapter that is included in the scope of delivery.

View of the right side



1 Optical drive

Depending on the device configuration, it can come with a CD-ROM, a DVD-ROM or a DVD-ROM/CD-RW drive. For example, you can read the electronic manual of the supplied "Backup PG" CD with this drive.

2 Floppy disk drive

Depending on the device configuration, a standard floppy disk drive (1,44 MB), a Superdisk LS120 or a Superdisk LS240 drive is built in. 3.5" diskettes (of 1.44 MB) and Superdisks (up to 120 MB) can be used with the LS120 drive. For LS240, additional Superdisks up to 240 Mbyte are required.

3 Headphones

You can connect an external stereo headphone or another audio output device to this headphone jack. The internal speaker is automatically disabled when a headphone is connected.

4 Microphone

You can connect an external microphone or another audio output device to this microphone jack.

5 PC-Card slots

The PC-Card slots can be used for Cardbus (32 Bit) and PCMCIA (16 bit) cards. You can insert card-size communication modules for MODEM, FAX-MODEM, ISDN, Token Ring, ETHERNET, memory expansions and SCSI interfaces. CardBus Cards are not supported by Windows NT. *Refer to Chapter 3.9 of the electronic manual.*

6 Air venting slots

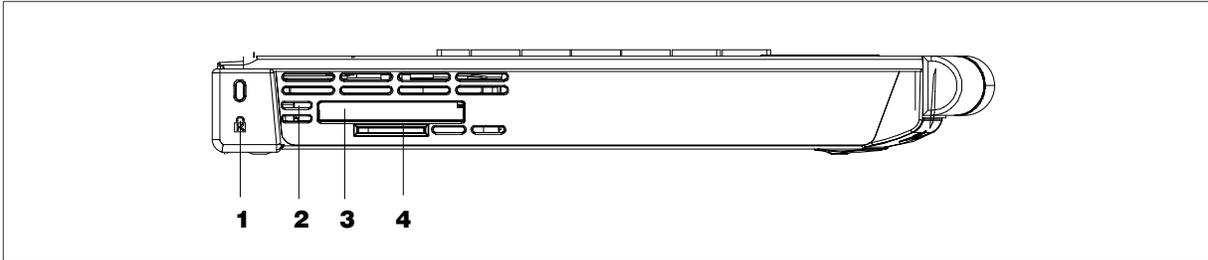
Here is the ventiduct.



Caution

The ventiducts for incoming and outgoing air must not be obstructed. Otherwise, there is a risk of overheating.

View of the left side



1 Opening for the Kensington lock

A security cable with a lock is connected to this opening. You can use it to protect your PG against theft by locking the cable to the writing desk or any heavy appliance.

2 Air venting slots

Here is the ventiduct.



Caution

The ventiducts for incoming and outgoing air must not be obstructed. Otherwise, there is a risk of overheating.

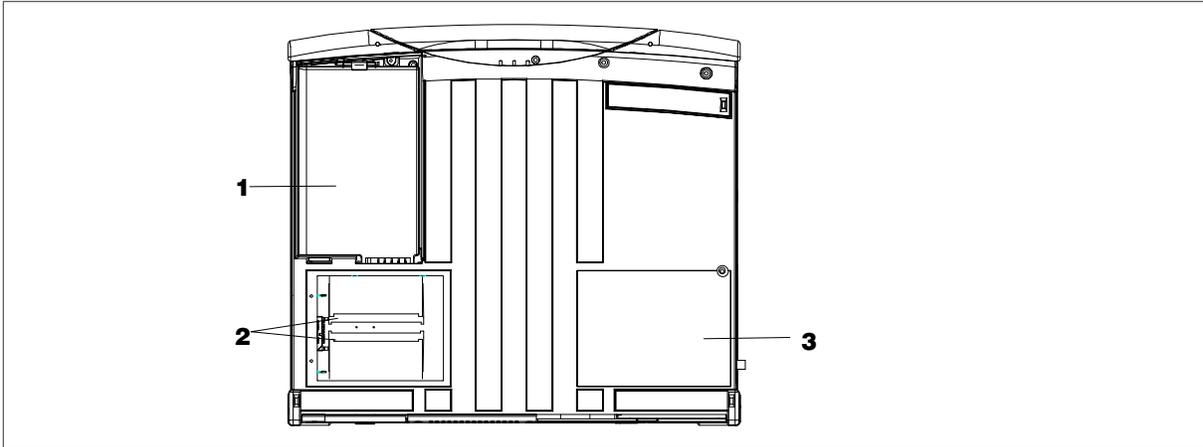
3 SIMATIC Memory Card interface

This interface can be used to read, program or delete SIMATIC Memory Cards for SIMATIC S5 and SIMATIC S7. The supplied S5 adapter can also be used to program or read out SIMATIC S5 EPROM modules.

4 SIMATIC Micro Memory Card interface

This interface can be used to read, program or delete Micro Memory Cards.

Bottom view



1 Rechargeable battery

The supplied rechargeable battery is installed behind a cover. The rechargeable battery (Lithium ion) provides mobility of the device, independent of an external power supply. The rechargeable battery also protects against data in case of power failure. Refer to Chapter 3.3 of the electronic manual.

2 Memory expansion

You can install memory modules in these slots to increase main memory. Maximum memory expansion: 2 x 256 MByte. Remove the cover to access the memory modules. Refer to Chapter 4.1 of the electronic manual.

3 Rating plate and Certificate of Authenticity

The rating plate and “Certificate of Authenticity” with the Microsoft Windows “Product Key”. You need this to install new software.

Connection to the Power Supply Unit

The SIMATIC Field PG can be operated with the supplied external AC adapter on 120 V/230 V power supply networks or with the rechargeable battery. The external power supply automatically selects the voltage. You should install the supplied battery pack before you connect the device to the power supply:

1. Flip the Field PG over, with closed display unit, and lay it down on a flat mat.
2. Unlock and open the battery pack cover on the bottom of the device.
3. Insert the battery pack.
4. Close the cover and turn the device over again.
5. Plug the supplied patch cord into the external power supply and plug the low-voltage plug into the unit's connector.
6. Connect the external power supply to a socket outlet with grounded protective conductor.

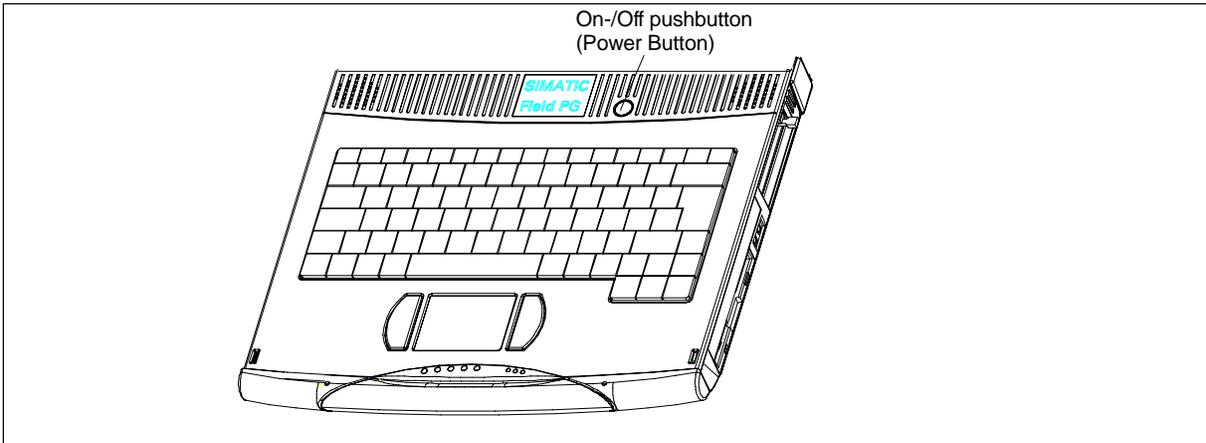


Warning

For reasons of safety you must use the patch cord and power supply that is included in the delivery. Operation of the unit is only permitted on grounded 120V/230V power supply networks.

Powering Up the SIMATIC Field PG

- Hold down the On-/Off pushbutton (Power Button) for approx. 1 second to power up the unit.



The operating system and system software supplied with the SIMATIC Field PG are preinstalled on the hard disk. Time consuming installation of the operating system and SIMATIC software programs is not required. Just unpack and power up your unit and you can immediately start your programming tasks without having to take extensive setup actions.

When powering up the device you have to distinguish between the following:

- **Initial start** to set up the SIMATIC Field PG's software and a
- **Complete restart** after initial start and authorization.

Initial Start of the SIMATIC Field PG

When powering up the SIMATIC Field PG for the **first** time the operating system is set up automatically (depending on the version delivered: Windows Me, Windows NT or Windows 2000 Professional). Please proceed as follows:

1. Switch on the SIMATIC Field PG.
2. The PC executes a self-test. During self-test the following message appears on the screen:

Press <F2> to enter SETUP

Wait until the message disappears and follow the instructions displayed on the screen.

3. If necessary, enter your product key. The product key can be found on the device or on the Windows manual in the line "Product Key" of the "Certificate of Authenticity".

Caution

Do not switch off the PG during initial startup. Otherwise, full initialization will fail.
Do **not** change the BIOS default values.

Startup under Microsoft Windows

The operating system is set up once you have entered the requisite information. The **Welcome to Windows** screen helps you to get familiar with the Desktop user interface.

Now, the user interface is displayed following system startup every time you power up or reset the P.

Authorization

To use the STEP 5 and STEP 7 programming software you have to install an authorization. This protected software may only be used with the requisite authorization. Authorizations for the SIMATIC software is included on the supplied authorization diskette.

To perform the authorization:

- Insert the authorization disk into the floppy disk drive.
- Click **Start** on the Windows task bar and
- Select the menu command **Simatic > AuthorsW > AuthorsW** to open the authorization tool which will guide you through the installation routine of the authorization. Copy the STEP 5 and STEP 7 authorization by selecting "All".

Notice

The authorization diskette supplied with the PG contains authorizations for the SIMATIC software you ordered only. The SIMATIC software you receive will correspond to your order form.
The diskette of the supplied version "Upgrade Installation" contains only the software for upgrading authorizations already preinstalled.
Software without authorizations in the in the scope of supply cannot be used when installed on the PG.
Keep the authorization diskette for saving the authorization in a safe place.

Additional software

You can now install the the supplied operating software for the DVD-ROM or the DVD-ROM/CD-RW drive. Place the CD in the drive and follow the instructions on the screen.

Complete restart of the SIMATIC Field PG

Once the SIMATIC Field PGs operating system is set up, the user interface of the operating system is displayed following system startup every time you switch on or reset the PC.

Starting the SIMATIC software programs

STEP 5 (does not exist on all delivered versions)

- Click **Start** on the Windows task bar and select the desired program choosing **Simatic > STEP 5**.
Please note that you have to install the authorization disk before working with STEP 5

STEP 7

- Click on the icon **SIMATIC Manager** on the Windows desktop or
- Click **Start** on the Windows task bar and select the desired program choosing **Simatic > STEP 7**.

Note

The transfer of a STEP 7-configuration from one PG to another is supported by the archive/retrieve options in STEP 7.

Open the SIMATIC Manager. For the transfer select the menu command **File > Archive** or **File > Retrieve**.

The procedure is explained in detail in the Online Help of STEP 7, in the chapter "Steps for File Archiving/Retrieval".

STEP 7-Micro/WIN 32

- Click on the icon **STEP7-MicroWIN** on the Windows desktop or
- Click **Start** on the Windows task bar and select the desired program choosing **Simatic > STEP 7-MicroWIN 32**.

Shut down the SIMATIC Field PG

Either close the display lid, press the On-/Off-pushbutton (Power Button) or select the respective Windows Start menu command to switch the Field PG from normal mode to one of the following modes:

- Standby (save to RAM),
- Hibernate (save to Disk),
- Off (Windows is shut down).

If the unit is shut down under Windows OS it is switched off automatically. If not operated under Windows you can switch the unit off via On-/Off-pushbutton.

Notice

The Windows NT versions do not support the standby and hibernate operating modes. After shut down the Field PG always has to be switched off via the Power Button.

Hold down the On-/Off pushbutton for more than 7 seconds to trigger the "Override" function. The device is switched off.

For details on operate states refer to Chapter 2.5 in the electronic manual. We strongly recommend to read this chapter.

Note

Via **Setup > Control Panel > Power Management** under Windows Me and Windows 2000 you can parameterize the reaction of the On-/Off-pushbutton and of the display lid.

To isolate the unit totally from the power supply network, you must unplug the patch cord and remove the rechargeable battery. *Refer to Chapter 3.2 in the electronic manual.*

Note

The drivers for the PROFIBUS DP / MPI SIMATIC interfaces and the programming interfaces for Memory Cards do not support the ACPI functions 'standby mode' and 'hibernate state'. The energy options of your device are preconfigured accordingly.

Reinstallation of the Software

In case of software errors reinstall your software using the Recovery Windows CD and CD "Backup PG". Refer to Chapter 8 of the electronic manual for details on software reinstallation. We recommend you print out this chapter to assist you in case of emergency.

All directories and files that were copied to your hard disk after the first set up will be restored.

Error Diagnosis

The information in the following section offers support for you to diagnose and partially remedy common errors by yourself.

| Error/Cause | Remedy |
|--|--|
| Power-ON LED is not lit | |
| <ul style="list-style-type: none"> PG is switched off Power supply connection error Rechargeable battery exhausted or not installed | <ul style="list-style-type: none"> Push the Power Button Check the connection to the power supply, mains cable, mains plug Recharge/install the battery pack |
| External monitor stays dark | |
| <ul style="list-style-type: none"> LCD enabled is entered in SETUP | <ul style="list-style-type: none"> CRT enabled or SIMULTAN entered in SETUP |
| The message: "Invalid configuration information... Press the F1 key for continue, F2 to run Setup utility" appears on the display/monitor | |
| <ul style="list-style-type: none"> Incorrect configuration data | <ul style="list-style-type: none"> Press the "F2" key, check the configuration data in the Setup program, enter default values if necessary, check error messages in the first Setup mask |
| The message: "No boot device available" appears on the display/monitor | |
| <ul style="list-style-type: none"> No bootable disk in the drive Wrong hard disk type entered in Setup | <ul style="list-style-type: none"> Use the "Fixed Disk Function" in the Setup program |
| The message: "Keyboard stuck key failure" appears on the display/monitor | |
| <ul style="list-style-type: none"> A blocked key was found during the system self-test of the keyboard | <ul style="list-style-type: none"> Check keyboard Restart system |
| Every time a key is pressed, a beep sounds without characters being displayed | |
| <ul style="list-style-type: none"> Keyboard buffer overflow | <ul style="list-style-type: none"> <CTRL > <PAUSE> |
| < \ > Key does not exist | |
| <ul style="list-style-type: none"> Incorrect keyboard driver being used | <ul style="list-style-type: none"> Load correct keyboard driver <ALT> <9>< 2> |
| After powering up this message appears: "Battery needs calibration cycle" | |
| <ul style="list-style-type: none"> Rechargeable battery not calibrated anymore | <ul style="list-style-type: none"> Clear the error message with the F1 key Carry out a learning cycle |

Further Support and Sales Information

If you have further questions on how to use the SIMATIC Field PG, please contact your Siemens representative or the SIMATIC Hotline:

- You can obtain general up-to-date information in the **Internet** under <http://www.ad.siemens.de/simatic-pg>
- You can find your local partner for Automation & Drives in our Partner Database in the **Internet** under the URL <http://www.ad.siemens.de/partner>

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