1 Overview

This product information contains additional information about the following product:

Summary

This document contains information about

- ➢ The NCM COM 1430 TF configuration tool. This is required to install, start up and test a SINEC CP1430 TF.
- ➢ The following communications processors

order number: 6GK1143-0TA00 and 0TB00
6GK1143-0TA01 and 0TB01
6GK1143-0TA02

This product information supplements the manual. It therefore provides you with information about characteristics of the product that could not be taken into account when the product manual went to print.

The product information deals with the following aspects:

- ➢ The scope of the product
- ➢ The environment required to operate the COM (devices and operating system)
- ➢ Conditions required for installation
- ➢ Compatibility with existing SINEC COMs
- ➢ Installation of the NCM COM 1430 TF

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4 Environment and Conditions for Operation

4.1 Operating system

The required operating system environment is S5-DOS/ST, Version 6.x

4.2 Devices on Which the Software Can Be Operated

The following devices are possible:

➢ PG 720, PG 720 C, PG 740, PG760

➢ PC IBM AT-compatible with the S5-DOS/ST2 PC package

Note on PCs with the V.24 interface:

➢ for CP with order number: 6GK1143-0TA00 and 0TB00
ONLINE functions of COM 1430 TF using the V.24 interface and the adapter cable 6ES5 734-1BD20 to the CP 1430 TF are not possible. Instead, use the Köster box with the connecting cables as described in the manual for the S5-DOS/ST-PC package.

➢ for CP with order number: 6GK1143-0TA01, -0TA02 and 0TB01
You can use the adapter cable 6ES5 734-1BD20

4.3 Memory Requirements, Device Configuration

Standard setting:

The standard settings (autoexec.bat and config.sys) created after installing S5-DOS/ST V6.x allow NCM COM 1430 TF to be operated.

Excerpt from the config.sys file: DEVICE = C:\DOS\EMM386.EXE NOEMS I=B000-B7FF I=C800-DFFF x=E000-E0FF I=E100-F5FF

Using the MS-DOS command **”mem /c ”**, you can obtain information about the available memory.

The available working memory in a device with the standard configuration is as follows:

➢ Conventional working memory: 593 Kbytes

➢ Upper memory: 157 Kbytes

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5 Installing NCM COM1430 TF

5.1 Notes on Installation:

☞ **Prior to installation, please read the ”read1430.me” file on the diskette.**

Notes on directory and file organization

Under S5-DOS/ST Version 6.x, COM 1430 TF uses the directory structure of the operating system.

COM 1430 TF accesses the following directories and the files they contain:

➢ SIMATIC system directory

- Printer file
- Path file

➢ Working directory (product-related file storage)
- Footer file
- S5 program files
- CP database files

etc.

When you install COM 1430 TF, the following are also created:

➢ NCM directory (for example SIN_COM, see following page)
- System files of COM 1430 TF

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5.2 Compatibility with Previous Products:

The SINEC COMs use the same common user interface, the Network Communication Manager (NCM) also known as the SINEC Shell.

When you install any SINEC COM with a newer NCM version, any existing older NCM version is overwritten. COMs that have already been installed then run under the new NCM.

☞ **The installation programs of the following products do not recognize the new NCM version:**

- COM 5412 V1.x (with NCMV1.1)
- COM 5430 TF V2.x (with NCMV1.1)
- COM 5431 FMS V1.x (with NCMV1.1)
- COM 1473 V1.x (with NCM V1.1)

If you install one of these NCM V1.x products, you must make sure that it is not installed in a directory that already contains NCM V5.x. **Otherwise, NCM V5.01 would be overwritten by NCM V1.1. NCM COM1430TF cannot, however, run under NCM V1.1!**

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5.3 Installing COM 1430 TF

✍Insert the COM diskette into the diskette drive and change to this drive and start the installation by typing in INSTALL.

Once the installation program has been called, a dialog allows you to control the installation. In the dialog, you can decide on the destination drive and can select an existing directory in a pull-down menu. You can also create a new directory. Install COM 1430 TF in an NCM directory. You can select the directory name to suit your purposes, for example SIN_COM.

☞ **COM 1430 TF must not be installed in the SIMATIC system directory.**

✍Once you have set the required path (displayed in the dialog), you can start the COM software installation with the F7 key.

✍Confirm ”start installation” by pressing the enter key.

The installation program checks the available space on the hard disk. If there is not enough space on the disk, a message is displayed. You can then stop the installation.

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Before the package is installed, the installation program checks whether you have already installed COM software in the selected directory on the hard disk. If the same software has already been installed, the version is checked. If the version on the hard disk is lower (in other words older) than that on the installation diskette, a new installation is performed. Otherwise, you are prompted to confirm that you want to continue with the installation.

➢ **The following files are installed in the COM directory:**

- COM1430.LOG
- COM1430.VER
- CP1430.CFG
- CP1430.MSK
- READ1430.ME
- S5PXCSHX.CMD SINEC Shell
- S5PDCSHX.DAT
- S5PECSHX.DAT
- S5PDCSHX.HLP
- S5PECSHX.HLP
- S5PXCSHX.HLP
- and a series of files beginning with NCM that form COM subsystems.

➢ **The following files are not installed and if required must be copied to the PG using the normal copying functions:**

- **Files for TF-PI services:**

*FB103 \ S5CI50ST.S5D
\ S5CI29ST.S5D
\ S5CI69ST.S5D

- **Files with example programs:**
- Introductory example for the transport interface
- Introductory example for the variable services
- Introductory example for the PI/domain services
- Introductory example for transparent data exchange with acknowledgment

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➢ **Temporary overload**

With a large number of connections, a high bus load on the SINEC H1 cable and during connection establishment phases on the CP, a temporary overload can occur indicated by the CP with PAFE and the corresponding ANZW.

ANZW 0bx8 or 0Bx9 can occur.

Remedy:

In this case the job must be repeated by the user program.

➢ **Connection aborts with the CP 1430 BASIC -0TA00 or -0TA01 with more than 25 transport connections and overload**

With the CP 1430 BASIC version V 3.06B, 62 transport connections can be assigned. With more than 25 transport connections and when large data frames are being transferred (> 1 Kbyte) sporadic connection aborts may occur that are indicated by the CP with the corresponding ANZW.

ANZW XAXA can occur.

In this case the job must be repeated by the user program.

Remedy: Use the CP 1430 TF Extended or Basic variant -0TA02

➢ **PG functions with the CP 1430 TF EXTENDED (6GK1143-0TB01) version 3 FWV3.04E**

The PG interface (AS 511) of the CP 1430 can be impaired sporadically when the ”Read Clock” job with ANR 218 is started simultaneously on the PLC.

Remedy:

Upgrade the CP 1430 to FW V 3.06E.

➢ **Programming 5V memory flash modules with COM 1430 TF**

When programming the new 5V memory modules, you require STEP 5 V6.6.

➢ **PAFE = 81 for “SYNCHRON” on fast CPUs 946/947 or 948**

With ”SYNCHRON”, the CP 1430 immediately runs through a warm restart. If the CPU triggers a job on the CP interface while the CP 1430 is starting up, the job is acknowledged with PAFE = 81.

Remedy:

Include a counter loop in the startup OBs (20/221/22).

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Notes on the CE Approval of SINEC Products

Product Name

CP 1430 TF order number 6GK1143-0TA00 and 0TB00
6GK1143-0TA01 and 0TB01
6GK1143-0TA02

EU EMC Directive 89/336/EEC

The SINEC products listed above meet the requirements of the EU Directive 89/336/EEC ”Electromagnetic Compatibility.
The EU conformity certificates are kept for the authorities responsible according to the EU directives listed above at the following address:

CE

Siemens Aktiengesellschaft
Bereich Automatisierungstechnik
Industrielle Kommunikation SINEC (AUT93)
Postfach 4848D-90327 Nürnberg
Federal Republic of Germany

Area of Application EMC

The products meet the following requirements:

Area of application	Requirements Emission	 Immunity
Industry	EN 50081-2 : 1993	EN 50082–2 : 1995

The products can also be used in a residential environment (residential, commercial and light industry).

Area of application	Requirements Emission	 Immunity
Residential	Individual approval	EN 50082–1 : 1992

An individual approval must be obtained from the appropriate national authority or testing body.

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Installation Guidelines

This product meets the requirements providing you adhere to the installation guidelines

1. SINEC H1, Manual for Triaxial networks
2. SINEC, Manual Industrial Twisted Pair
3. System Manual AG S5-135U/155U; Manual for S5-115U/H/F

Installation of the Equipment

Programmable logic controllers of the SIMATIC S5-135U/155U/H series must be installed in metal cabinets according to these guidelines. Programmable logic controllers of the SIMATIC S5-115U/H/F series must be installed in grounded, closed, metal cabinets (for example, switchgear cubicles)

Working in Cabinets

To protect the module from electrostatic discharge, make sure that you neutralize any electrostatic charge on your body before opening the cabinet.

Notes for the Manufacturers of Machines

The product is not a machine in the sense of the EU directive. There is therefore no conformity certificate for the EU directive 89/392 for machines. If the product is part of the electrical equipment of a machine, the manufacturer of the machine must include the product in the conformity certificate procedure for the machine.

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