4.4 Technical Data

Operating and Environmental Conditions

Degree of protection	IP 00
Permitted ambient temperature in operation	0 to 60 ^{o}C operation without fan
Transport and storage temperature	-40 to +70 ^{o}C
Humidity class	95% humidity at 25 ^{o}C, no condensation
Operating altitude	up to 3000 m above sea level

Table 4.3: Operating and Environmental Conditions

Components and Transmission Rates

Microprocessor	80386 SX 20 MHz
Ethernet controller	82596 SX 20 MHz
Ethernet serial interface:	82503
Transmission rates	- AS511 TTY interface, 9600 bps - AUI interface, 10 Mbps - TP interface, 10 Mbps

Table 4.4: Components and Transmission Rates

Mechanical and Electrical Data

Weight	Approx. 0.6 kg
Board format	Double Eurocard (160 x 233.4 mm)
Front panel width	20.3 mm (= 1 1/3 standard slots)
Backplane connector	ES 902, 2 x Row 2, 48-pin
Front connectors - PG connector - AUI/TP connector	 15-pin D SUB with securing screws 15-pin D SUB with securing slide
Supply voltages	+ 5 V, + 5%, - 5% +24 V, +25%, -15%
Current consumption	+ 5 V: 2.7 A max. At rated load 0.5A by transceiver +24 V: max. 70 mA UBATT (battery backup) : 110 µA max. 20 µA typical.

Table 4.5: Mechanical and Electrical Data

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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➢ **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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