

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

SIEMENS SIMATIC NET

6GK7343-1GX21-0XE0

CP 343-1 ADVANCED ETHERNET PROCESSOR

Applicable product family: SIMATIC S7-300 communication processors

OFFICIAL SOURCE

6GK7343-1GX21-0XE0.pdf

The following pages are selected from the supplied manufacturer document and retain their original page content.

Product type designation



CP 343-1 Advanced

Communications processor CP 343-1 Advanced for connection of SIMATIC S7-300 to Industrial Ethernet: PROFINET IO Controller, PROFINET CBA, ISO, TCP/IP and UDP, S7 communication, fetch/write, SEND/RECEIVE, with and without RFC1006, HTTP with JAVA, Multicast, chargeable Communication modules, HTML diagnostics, FTP Client/Server Email, SNMP, DHCP, NTP-CPU Sync, 10/100 MBit, nur RJ45 connection

Transmission rate

Transfer rate

- at the 1st interface

10 ... 100 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet

1

Number of electrical connections

- at the 1st interface / acc. to Industrial Ethernet
- for power supply

1

1

Type of electrical connection

- at the 1st interface / acc. to Industrial Ethernet
- of Industrial Ethernet interface
- for power supply

RJ45 port

RJ45 port

2-pole plugable terminal block

design of the removable storage / C-PLUG

Yes

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage

DC

Supply voltage / 1 / from backplane bus

5 V

Supply voltage

24 V

Supply voltage / external	24 V
Supply voltage / external / at DC / Rated value	24 V
Relative positive tolerance / at DC / at 24 V	20 %
Relative negative tolerance / at DC / at 24 V	15 %
Consumed current	
• from backplane bus / at DC / at 5 V / typical	0.14 A
Power loss [W]	14.7 W

Permitted ambient conditions

Ambient temperature	
• for vertical installation / during operation	0 ... 40 °C
• for horizontally arranged busbars / during operation	0 ... 60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP20

Design, dimensions and weight

Module format	Compact module S7-200 double width
Width	80 mm
Height	125 mm
Depth	120 mm
Net weight	0.8 kg
Mounting type	
• S7-300 rail mounting	Yes

Performance data / open communication

Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	16
Amount of data	
• as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum	2 Kibyte
Number of Multicast stations	16

Performance data / S7 communication

Number of possible connections / for S7 communication

- maximum

16

Performance data / multi-protocol mode

Number of active connections / with multi-protocol mode

48

Performance data / IT functions

Number of possible connections

- as client / by means of FTP / maximum
- as server / by means of FTP / maximum

10

2

Number of possible connections

- as server / by means of HTTP / maximum
- as e-mail client / maximum

4

1

Amount of data / as user data for email / maximum

8 Kibyte

Storage capacity / of the user memory

- as flash memory file system
- as RAM

28 Mibyte

30 Mibyte

Number of possible write cycles / of the flash memory cells

100000

Performance data / PROFINET communication / as PN IO-Controller

Number of PN IO devices / on PROFINET IO controller / usable / total

125

Number of external PN IO lines / with PROFINET / per rack

1

Amount of data

- as user data for input variables / as PROFINET IO controller / maximum
- as user data for input variables / as PROFINET IO controller / maximum
- as user data for input variables per PN IO device / as PROFINET IO controller / maximum
- as user data for output variables per PN IO device / as PROFINET IO controller / maximum

4 Kibyte

4 Kibyte

1433 byte

1433 byte

Performance data / PROFINET CBA

Number of remote connection partners / with PROFINET CBA

64

Number of connections / with PROFINET CBA / total

1000

Amount of data

- as user data for digital inputs / with PROFINET CBA / maximum
- as user data for digital outputs / with PROFINET CBA / maximum

8 Kibyte

8 Kibyte

- as user data for arrays and data types / in the case of acyclic transmission / with PROFINET CBA / maximum
- as user data for arrays and data types / with PROFINET CBA / with cyclical transfer / maximum
- as user data for arrays and data types / with PROFINET CBA / in the case of local interconnection / maximum

8 Kibyte

450 byte

2400 byte

Performance data / PROFINET CBA / remote connection / with acyclic transmission

Refresh time / of the remote interconnections / in the case of acyclic transmission / with PROFINET CBA

100 ms

Number of remote connections to input variables / in the case of acyclic transmission / with PROFINET CBA / maximum

128

Number of remote connections to output variables / in the case of acyclic transmission / with PROFINET CBA / maximum

128

Amount of data

- as user data for remote interconnections with input variables / in the case of acyclic transmission / with PROFINET CBA
- as user data for remote interconnections with output variables / in the case of acyclic transmission / with PROFINET CBA

8 Kibyte

8 Kibyte

Performance data / PROFINET CBA / remote connection / with cyclic transmission

Refresh time / of the remote interconnections / with PROFINET CBA / with cyclical transfer

8 ms

Number of remote connections to input variables / with PROFINET CBA / with cyclical transfer / maximum

200

Number of remote connections to output variables / with PROFINET CBA / with cyclical transfer / maximum

200

Amount of data

- as user data for remote interconnections with input variables / with PROFINET CBA / with cyclical transfer / maximum
- as user data for remote interconnections with output variables / with PROFINET CBA / with cyclical transfer / maximum

2000 byte

2000 byte

Performance data / PROFINET CBA / HMI variables via PROFINET / acyclic

Number of connectable HMI stations / for HMI variables / in the case of acyclic transmission / with PROFINET CBA

3

Refresh time / of the HMI variables / in the case of acyclic transmission / with PROFINET CBA	500 ms
Number of HMI variables / in the case of acyclic transmission / with PROFINET CBA / maximum	200
Amount of data / as user data for HMI variables / in the case of acyclic transmission / with PROFINET CBA / maximum	8 Kibyte

Performance data / PROFINET CBA / device-internal connections

Number of internal connections / with PROFINET CBA / maximum	256
Amount of data / of the internal connections / with PROFINET CBA / maximum	2400 byte

Performance data / PROFINET CBA / connections to constants

Number of connections with constants / with PROFINET CBA / maximum	200
Amount of data / as user data for interconnections with constants / with PROFINET CBA / maximum	4096 byte

Performance data / PROFINET CBA / PROFIBUS proxy functionality

Product function / with PROFINET CBA / PROFIBUS proxy functionality	No
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Performance data / telecontrol

Protocol / is supported	
• TCP/IP	Yes
Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
• LLDP	Yes
Configuration software	
• required	STEP 7 V5.3 SP2 or higher
• for PROFINET CBA / required	SIMATIC iMap V2.0 SP1 and higher
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

Product functions / Diagnosis

Product function / Web-based diagnostics	Yes
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Product functions / switch

Product feature / Switch	No
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Product functions / Redundancy

Product function	
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- Ring redundancy

No

Product functions / Security

Product function

- ACL - IP-based
- ACL - IP-based for PLC/routing
- switch-off of non-required services
- Blocking of communication via physical ports
- log file for unauthorized access

Yes

No

No

No

No

Product functions / Time

Product function / SICLOCK support

Yes

Product function / pass on time synchronization

Yes

Protocol / is supported

- NTP

Yes

Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>

<http://www.siemens.com/simatic-net>

<https://mall.industry.siemens.com>

<http://www.siemens.com/industry/infocenter>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

Security information

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>. (V3.4)

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