

Product type designation

CP 343-1 ERPC

Communications processor CP 343-1 ERPC for connection of SIMATIC S7-300 CPU to Industrial Ethernet and to various databases Functions: TCP/UDP, S7 comm., open communication with a. without RFC1006, Multicast, Web server, Clock time via SIMATIC method or NTP, access protection via IP access list SNMP, DHCP, C-plug, Gigabit interface 1x RJ45 (10/100/1000 MB)



Transmission rate

Transfer rate

- at the 1st interface

10 ... 1000 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
- for power supply

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 / 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	
<ul style="list-style-type: none"> • from backplane bus / at DC / at 5 V / typical 	0.3 A
<ul style="list-style-type: none"> • from external supply voltage / at DC / at 24 V / typical 	0.16 A
<ul style="list-style-type: none"> • from external supply voltage / at DC / at 24 V / maximum 	0.6 A
Power loss [W]	14.7 W

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • for vertical installation / during operation 	0 ... 40 °C
<ul style="list-style-type: none"> • for horizontally arranged busbars / during operation 	0 ... 60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • 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 S7-300 double width
Width	80 mm
Height	125 mm
Depth	120 mm
Net weight	0.8 kg
Mounting type	
<ul style="list-style-type: none"> • S7-300 rail mounting 	Yes

Performance data / open communication

Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	8
Amount of data	
<ul style="list-style-type: none"> • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum 	8 Kibyte
<ul style="list-style-type: none"> • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum 	8 Kibyte
<ul style="list-style-type: none"> • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum 	2 Kibyte
Number of Multicast stations	8

Performance data / S7 communication

Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> • maximum • Note 	8 also 2 PG/OP connections and 1 diagnostics connection

Performance data / multi-protocol mode

Number of active connections / with multi-protocol mode	32
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Performance data / IT functions

Number of possible connections	
<ul style="list-style-type: none"> • as server / by means of HTTP / maximum 	4
Number of possible write cycles / of the flash memory cells	100000

Performance data / ERPC functions

Number of possible connections / for communication with ERP or MES stations / maximum	8
Number of possible logical triggers / per CP / maximum	8
Number of configurable ERPC symbols for database access	
<ul style="list-style-type: none"> • per CPU / maximum • per logical trigger / maximum 	2000 255
Amount of data / as user data and header information per logical trigger	8 Kibyte

Performance data / telecontrol

Protocol / is supported	
<ul style="list-style-type: none"> • TCP/IP 	Yes
Product function / MIB support	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 • DCP • LLDP 	Yes Yes Yes
Configuration software	
<ul style="list-style-type: none"> • required 	STEP 7 V5.4 SP5 + HSP or higher
Identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information • I&M1 – higher-level designation/location designation 	Yes 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

- Ring redundancy

No

Product functions / Security

Product function

- password protection for Web applications
- 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

No

Yes

No

Yes

Yes

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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