

Product type designation

CP 343-1

Communications processor CP 343-1 for connection of SIMATIC S7-300 to Industrial Ethernet via ISO and TCP/IP, PROFINET IO controller or PROFINET IO device, integrated 2-port switch ERTEC 200, S7 communication, fetch/write, send/receive with and without RFC1006, Multicast DHCP, NTC- CPU Sync, diagnostic, initialization via LAN, 2x RJ45 connection for LAN with 10/100 Mbit/s



Transfer rate

Transfer rate

- at the 1st interface

10 ... 100 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet

2

Number of electrical connections

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

2

1

Type of electrical connection

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

RJ45 port

RJ45 port

Type of electrical connection

- for power supply

2-pole plugable terminal block

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	0.2 A
• from external supply voltage / at DC / at 24 V / typical	0.16 A
• from external supply voltage / at DC / at 24 V / maximum	0.2 A
Power loss [W]	5.8 W

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 weights

Module format	Compact module S7-300 single width
Width	40 mm
Height	125 mm
Depth	120 mm
Net weight	0.22 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

<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	16

Performance data / S7 communication

Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> • maximum 	16

Performance data / multi-protocol mode

Number of active connections / with multi-protocol mode	32
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Performance data / PROFINET communication / as PN IO controller

Number of PN IO devices / on PROFINET IO controller / usable / total	32
Number of external PN IO lines / with PROFINET / per rack	1
Amount of data	
<ul style="list-style-type: none"> • as user data for input variables / as PROFINET IO controller / maximum 	1 Kibyte
<ul style="list-style-type: none"> • as user data for input variables / as PROFINET IO controller / maximum 	1 Kibyte
<ul style="list-style-type: none"> • as user data for input variables per PN IO device / as PROFINET IO controller / maximum 	1433 byte
<ul style="list-style-type: none"> • as user data for output variables per PN IO device / as PROFINET IO controller / maximum 	1433 byte
<ul style="list-style-type: none"> • as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum 	240 byte
<ul style="list-style-type: none"> • as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum 	240 byte

Performance data / PROFINET communication / as PN IO device

Product function / PROFINET IO device	Yes
Amount of data	
<ul style="list-style-type: none"> • as user data for input variables / as PROFINET IO device / maximum 	512 byte
<ul style="list-style-type: none"> • as user data for input variables / as PROFINET IO device / maximum 	512 byte
<ul style="list-style-type: none"> • as user data for input variables / for each sub-module as PROFINET IO device 	240 byte

<ul style="list-style-type: none"> • as user data for input variables / for each sub-module as PROFINET IO device 	240 byte
<ul style="list-style-type: none"> • as user data for the consistency area for each sub-module 	240 byte
Number of submodules / per PROFINET IO-Device	32

Performance data / telecontrol

Protocol / is supported	
<ul style="list-style-type: none"> • TCP/IP 	Yes

Product functions / management, configuration, engineering

Product function / MIB support	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	Yes
Configuration software	
<ul style="list-style-type: none"> • required 	STEP 7 V5.4 SP2 or higher / STEP 7 Professional V11 (TIA Portal) or higher
Identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> • I&M1 – higher-level designation/location designation 	Yes

Product functions / Diagnostics

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

Product feature / Switch	Yes
Product function	
<ul style="list-style-type: none"> • switch-managed 	No
<ul style="list-style-type: none"> • with IRT / PROFINET IO switch 	Yes
<ul style="list-style-type: none"> • Configuration with STEP 7 	Yes

Product functions / redundancy

Product function	
<ul style="list-style-type: none"> • Ring redundancy 	Yes
<ul style="list-style-type: none"> • Redundancy manager 	No
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes

Product functions / Security

Product function	
<ul style="list-style-type: none"> • password protection for Web applications 	No
<ul style="list-style-type: none"> • ACL - IP-based 	Yes
<ul style="list-style-type: none"> • ACL - IP-based for PLC/routing 	No
<ul style="list-style-type: none"> • switch-off of non-required services 	Yes

- Blocking of communication via physical ports
- log file for unauthorized access

Yes
No

Product functions / time

Product function / SICLOCK support	Yes
Product function / pass on time synchronization	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes

Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com

Security information

Security information	<p>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)</p>
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