

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



Transmission 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

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

RJ45 port

RJ45 port

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

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 S7-300 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
• 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	
• TCP/IP	Yes
Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
• LLDP	Yes
Configuration software	
• required	STEP 7 V5.4 SP2 or higher / STEP 7 Professional V11 (TIA Portal) or 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
Product functions / switch	
Product feature / Switch	Yes
Product function	
• switch-managed	No
• with IRT / PROFINET IO switch	Yes
• Configuration with STEP 7	Yes
Product functions / Redundancy	
Product function	
• Ring redundancy	Yes
• Redundancy manager	No
• Parallel Redundancy Protocol (PRP)/operation in the PRP-network	Yes
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product functions / Security	
Product function	
• password protection for Web applications	No
• ACL - IP-based	Yes
• ACL - IP-based for PLC/routing	No
• switch-off of non-required services	Yes
• Blocking of communication via physical ports	Yes
• log file for unauthorized access	No

Product functions / Time

Product function / SICLOCK support	Yes
Product function / pass on time synchronization	Yes
Protocol / is supported	
• NTP	Yes

Accessories

Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL <http://www.siemens.com/snst>
- to website: Industrial communication <http://www.siemens.com/simatic-net>
- to website: Industry Mall <https://mall.industry.siemens.com>
- to website: Information and Download Center <http://www.siemens.com/industry/infocenter>
- to website: Image database <http://automation.siemens.com/bilddb>
- to website: CAx Download Manager <http://www.siemens.com/cax>
- to website: Industry Online Support <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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