

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	1
• for power supply	1
Type of electrical connection	
• at the 1st interface / acc. to Industrial Ethernet	RJ45 port
• of Industrial Ethernet interface	RJ45 port
• for power supply	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

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 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	10
• as server / by means of FTP / maximum	2
Number of possible connections	
• as server / by means of HTTP / maximum	4
• as e-mail client / maximum	1
Amount of data / as user data for email / maximum	8 Kibyte
Storage capacity / of the user memory	
• as flash memory file system	28 Mibyte
• as RAM	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	4 Kibyte
• as user data for input variables / as PROFINET IO controller / maximum	4 Kibyte
• as user data for input variables per PN IO device / as PROFINET IO controller / maximum	1433 byte
• as user data for output variables per PN IO device / as PROFINET IO controller / maximum	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	8 Kibyte

- as user data for digital outputs / with PROFINET CBA / maximum 8 Kibyte
- as user data for arrays and data types / in the case of acyclic transmission / with PROFINET CBA / maximum 8 Kibyte
- as user data for arrays and data types / with PROFINET CBA / with cyclical transfer / maximum 450 byte
- as user data for arrays and data types / with PROFINET CBA / in the case of local interconnection / maximum 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	8 Kibyte
• as user data for remote interconnections with output variables / in the case of acyclic transmission / with PROFINET CBA	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	2000 byte
• as user data for remote interconnections with output variables / with PROFINET CBA / with cyclical transfer / maximum	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 functions / management, configuration

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
Product functions / Redundancy	
Product function	
• Ring redundancy	No
Product functions / Security	
Product function	
• ACL - IP-based	Yes
• ACL - IP-based for PLC/routing	No
• switch-off of non-required services	No
• Blocking of communication via physical ports	No
• 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
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	
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