SIEMENS

Data sheet 6GK7343-1EX30-0XE0

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 RFC1006, multicast, DHCP, NTC- CPU sync, with and without diagnostics, 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 / according to Industrial Ethernet	2
number of electrical connections	
● at the 1st interface / according to Industrial Ethernet	2
● for power supply	1
type of electrical connection	
● of Industrial Ethernet interface	RJ45 port
● at the 1st interface / according to Industrial Ethernet	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
fastening method	
● S7-300 rail mounting	Yes
performance data / open communication	
number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	16
data volume	
● 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	32
performance data / PROFINET communication / as PN IO controller	
number of PN IO devices / on PROFINET IO controller / operable / total	32
number of external PN IO lines / with PROFINET / per rack	1
data volume	
● as user data for input variables / as PROFINET IO controller / maximum	1 Kibyte
● as user data for output variables / as PROFINET IO controller / maximum	1 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
● as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum	240 byte
● 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
data volume	
● as user data for input variables / as PROFINET IO device / maximum	512 byte
● as user data for output variables / as PROFINET IO device / maximum	512 byte
● as user data for input variables / for each sub-module as PROFINET IO device	240 byte
● as user data for output variables / for each sub-module as PROFINET IO device	240 byte
● 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 functions / management, configuration, engineering	
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 / diagnostics	
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
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
standards, specifications, approvals / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes; GB3836.1, GB3836.8
certificate of suitability / CCC / for hazardous zone according to GB standard / as marking	Ex nA IIC T4 Gc
further information / internet links	
internet link	
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)
Approvals / Certificates	
General Product Approval	

Manufacturer Declaration

Declaration of Conformity

General Product Approval	EMV	For use in hazardous locations			
RCM	KC	ATEX	IECEx	FM	CCC-Ex

For use in hazardous locations	Marine / Shipping	Environment	
UL	PRS	Confirmation	EPD

last modified: 3/22/2024