SIEMENS

Show actual product details

Data sheet 6GK7343-1GX31-0XE0

Product type designation

CP 343-1 Advanced

SIMATIC NET CP 343-1 ADVANCED; FOR CONNECTING SIMATIC S7-300 CPU TO IND. ETHERNET; PROFINET IO CONTROLLER AND/OR IO-DEVICE; RT AND IRT MRP, PROFINET CBA; TCP/IP; ISO,UDP,S7-COM,S5-KOMP. COM., (SEND/RECEIVE) W. FETCH/WRITE WITH AND WITHOUT RFC 1006, MULTICAST DIAGNOSIS EXTENSION, SNMP, DHCP, FTP CLIENT/SERVER, E-MAIL, GIGABIT-SS1X RJ45 (10/100/1000) PROFINET-SS 2X RJ45(10/100MBIT) PROFINET CBA; SECURITY (FIREWALL/VPN); PROFIENERGY

Transmission rate	
Transfer rate	
• at the 1st interface	10 ... 1000 Mbit/s
• at the 2nd interface	10 ... 100 Mbit/s

Interfaces	
Number of interfaces / acc. to Industrial Ethernet	3
Number of electrical connections	
• at the 1st interface / acc. to Industrial Ethernet	1
• at the 2nd interface / acc. to Industrial Ethernet	2
• for power supply	1
Type of electrical connection	
• at the 1st interface / acc. to Industrial Ethernet	RJ45 port
• at the 2nd interface / acc. to Industrial Ethernet	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 / 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
• from external supply voltage / at DC / at 24 V / typical	0.48 A
• from external supply voltage / at DC / at 24 V / maximum	0.62 A
Power loss [W]	14.7 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
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
• 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	
Product function / PROFINET IO controller	Yes
Number of PN IO devices / on PROFINET IO controller / usable / total	128
Number of PN IO IRT devices / on PROFINET IO controller / usable	128
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

• 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
Amount of data	
• as user data for input variables / as PROFINET IO device / maximum	1024 byte
• as user data for input variables / as PROFINET IO device / maximum	1024 byte
• as user data for input variables / for each sub-module as PROFINET IO device	240 byte
• as user data for input 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 / 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	250 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
Performance data / telecontrol	
Protocol / is supported	
• TCP/IP	Yes
Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	Yes
Configuration software	
• required	STEP7 V5.5 SP2 HF1 or higher / STEP 7 Professional V12 (TIA Portal) or higher
• for PROFINET CBA / required	SIMATIC iMap V3.0 SP4 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
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	Yes
• Parallel Redundancy Protocol (PRP)/operation in the PRP-network	Yes
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product functions / Security	
Firewall version	stateful inspection
Product function / with VPN connection	IPSec

Type of encryption algorithms / with VPN connection	AES-256, AES-192, AES-128, 3DES-168, DES-56
Type of authentication procedure / with VPN connection	Preshared key (PSK), X.509v3 certificates
Type of hashing algorithms / with VPN connection	MD5, SHA-1
Number of possible connections / with VPN connection	32
Product function	
• password protection for Web applications	Yes
• ACL - IP-based	Yes
• ACL - IP-based for PLC/routing	Yes
• 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

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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