## **SIEMENS**

## **Data sheet**

6AG1343-1GX31-4XE0



SIPLUS NET CP 343-1 Advanced based on 6GK7343-1GX31-0XE0 with conformal coating, 0...+60 °C, for connection of the SIMATIC S7-300 CPU to Ind. Ethernet; PROFINET IO controller and/or IO Device; RT and RT and IRT IRT, MRP, PROFINET CBA; TCP/IP ISO, UDP, S7 communication, S5-compatible communication, (send/receive) with fetch/write with and without RFC 1006, multicast diagnostics extension,SNMP,DHCP, FTP client/server, email, Gigabit-SS1X RJ45 (10/100/1000); PROFINET interface 2x RJ45(10/100 Mbit) PROFINET CBA; security

Figure similar

transfer rate	
transfer rate	
at the 1st interface	10 1000 Mbit/s
• at the 2nd interface	10 100 Mbit/s
interfaces	
number of interfaces / according to Industrial Ethernet	3
number of electrical connections	
• at the 1st interface / according to Industrial Ethernet	1
• at the 2nd interface / according to Industrial Ethernet	2
<ul><li>for power supply</li></ul>	1
type of electrical connection	
• at the 1st interface / according to Industrial Ethernet	RJ45 port
• at the 2nd interface / according to Industrial Ethernet	RJ45 port
type of electrical connection	
<ul><li>for power supply</li></ul>	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	
<ul><li>from backplane bus / at DC / at 5 V / typical</li></ul>	0.14 A
<ul> <li>from external supply voltage / at DC / at 24 V / typical</li> </ul>	0.48 A
• from external supply voltage / at DC / at 24 V / maximum	0.62 A
power loss [W]	14.7 W
ambient conditions	
ambient temperature	
<ul> <li>for vertical installation / during operation</li> </ul>	0 40 °C
<ul> <li>for horizontally arranged busbars / during operation</li> </ul>	0 60 °C
during storage	-40 +70 °C
during transport	-40 +70 °C
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)
relative humidity	

with condensation / according to IEC 60068-2-38 / maximum	100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation
chemical resistance / to commercially available cooling	Yes; incl. airborne diesel and oil droplets
chemical resistance / to commercially available cooling lubricants	res, mer. amborne dieser and oil dropiets
resistance to biologically active substances	
conformity according to EN 60721-3-3	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request
• conformity according to EN 60721-3-6	Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)
resistance to chemically active substances	
• conformity according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray in accordance with EN 60068-2-52 (Severity 3). The supplied plug covers must remain in place on the unused interfaces during operation.
<ul> <li>conformity according to EN 60721-3-6</li> </ul>	Yes
resistance to mechanically active substances	
• conformity according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
conformity according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
coating / for equipped printed circuit board / according to EN 61086	Yes; Class 2 for high availability
type of coating / protection against pollution according to EN 60664-3	Yes; Protection of the type 1
type of test / of the coating / according to MIL-I-46058C	Yes; Coating discoloration during service life possible
product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, class A
protection class IP	IP20
design, dimensions and weights	
module format	Compact module
width	80 mm
height	125 mm
depth	120 mm
net weight	0.8 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
	-
means of SEND/RECEIVE blocks / maximum	8 Kibyte
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks /	
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks /	8 Kibyte
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means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks /	8 Kibyte 8 Kibyte 8 Kibyte
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations	8 Kibyte  8 Kibyte  8 Kibyte  2 Kibyte
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication	8 Kibyte  8 Kibyte  8 Kibyte  2 Kibyte
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means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum	8 Kibyte  8 Kibyte  8 Kibyte  2 Kibyte
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode	8 Kibyte  8 Kibyte  2 Kibyte  16
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode  number of active connections / with multi-protocol mode	8 Kibyte  8 Kibyte  2 Kibyte
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode  number of active connections / with multi-protocol mode	8 Kibyte  8 Kibyte  2 Kibyte  16
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode  number of active connections / with multi-protocol mode  performance data / IT functions  number of possible connections	8 Kibyte  8 Kibyte  2 Kibyte  16  48
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode  number of active connections / with multi-protocol mode  performance data / IT functions  number of possible connections  • as client / by means of FTP / maximum	8 Kibyte  8 Kibyte  2 Kibyte  16  16
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode  number of active connections / with multi-protocol mode  performance data / IT functions  number of possible connections  • as client / by means of FTP / maximum  • as server / by means of FTP / maximum	8 Kibyte  8 Kibyte  2 Kibyte  16  48
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode  number of active connections / with multi-protocol mode  performance data / IT functions  number of possible connections  • as client / by means of FTP / maximum  • as server / by means of FTP / maximum  number of possible connections	8 Kibyte 8 Kibyte 2 Kibyte 16 16 16
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode  number of active connections / with multi-protocol mode  performance data / IT functions  number of possible connections  • as client / by means of FTP / maximum  • as server / by means of FTP / maximum  number of possible connections  • as server / by means of HTTP / maximum	8 Kibyte  8 Kibyte  2 Kibyte  16  16  48
means of SEND/RECEIVE blocks / maximum  data volume  • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum  number of Multicast stations  performance data / S7 communication  number of possible connections / for S7 communication  • maximum  performance data / multi-protocol mode  number of active connections / with multi-protocol mode  performance data / IT functions  number of possible connections  • as client / by means of FTP / maximum  • as server / by means of FTP / maximum  number of possible connections	8 Kibyte 8 Kibyte 2 Kibyte 16 16 16

a as flash moment file system	29 Milhyda	
<ul><li>as flash memory file system</li><li>as RAM</li></ul>	28 Mibyte 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 / operable / total	128	
number of PN IO IRT devices / on PROFINET IO controller / operable	128	
number of external PN IO lines / with PROFINET / per rack	1	
data volume		
<ul> <li>as user data for input variables / as PROFINET IO controller / maximum</li> </ul>	4 Kibyte	
<ul> <li>as user data for output variables / as PROFINET IO controller / maximum</li> </ul>	4 Kibyte	
<ul> <li>as user data for input variables per PN IO device / as PROFINET IO controller / maximum</li> </ul>	1433 byte	
<ul> <li>as user data for output variables per PN IO device / as PROFINET IO controller / maximum</li> </ul>	1433 byte	
<ul> <li>as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum</li> </ul>	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	1024 byte	
as user data for output variables / as PROFINET IO device / maximum	1024 byte	
as user data for input variables / for each sub-module as PROFINET IO device	240 byte	
<ul> <li>as user data for output variables / for each sub-module as PROFINET IO device</li> </ul>	240 byte	
<ul> <li>as user data for the consistency area for each sub- module</li> </ul>	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	
<ul><li>data volume</li><li>as user data for digital inputs / with PROFINET CBA /</li></ul>	8 Kibyte	
as user data for digital outputs / with PROFINET CBA /	8 Kibyte	
maximum  • 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 interconnection / w	ith acyclic transfer	
update 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	
data volume		
<ul> <li>as user data for remote interconnections with input variables / in the case of acyclic transmission / with PROFINET CBA</li> </ul>	8 Kibyte	
<ul> <li>as user data for remote interconnections with output variables / in the case of acyclic transmission / with PROFINET CBA</li> </ul>	8 Kibyte	
performance data / PROFINET CBA / remote interconnection / with cyclic transfer		
update time / of the remote interconnections / with cyclical	8 ms	
transfer / with PROFINET CBA		

	000
number of remote connections to input variables / with PROFINET CBA / with cyclic transfer / maximum	200
number of remote connections to output variables / with cyclical transfer / with PROFINET CBA / maximum	200
data volume	
<ul> <li>as user data for remote interconnections with input variables / with cyclical transfer / with PROFINET CBA / maximum</li> </ul>	2000 byte
<ul> <li>as user data for remote interconnections with output variables / with cyclical transfer / with PROFINET CBA / maximum</li> </ul>	2000 byte
performance data / PROFINET CBA / HMI variables via PROFINE	T / acyclic
number of connectable HMI stations / for HMI variables / in the case of acyclic transmission / with PROFINET CBA	3
update 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
data volume / as user data for HMI variables / in the case of acyclic transmission / with PROFINET CBA / maximum	8 Kibyte
performance data / PROFINET CBA / device-internal interconnec	ctions
number of internal connections / with PROFINET CBA / maximum	256
data volume / of the internal connections / with PROFINET CBA / maximum	2400 byte
performance data / PROFINET CBA / interconnections to consta	nts
number of connections with constants / with PROFINET CBA / maximum	200
data volume / as user data for interconnections with constants / with PROFINET CBA / maximum	4096 byte
performance data / PROFINET CBA / PROFIBUS proxy functional	
product function / with PROFINET CBA / PROFIBUS proxy functionality	No
performance data / telecontrol	
protocol / is supported	
• TCP/IP	Yes
product functions / management, configuration, engineering	
product function / MIB support	Yes
protocol / is supported	V
• SNMP v1	Yes
• SNMP v3	Yes
• DCP	Yes
LLDP  configuration coffusors	Yes
configuration software  • required	STEP7 V5.5 SP2 HF1 or higher / STEP 7 Professional V12 (TIA Portal) or
- required	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 / 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	Yes
redundancy manager  protocol / is supported / Media Redundancy Protocol (MRP)	
redundancy manager	Yes

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	
<ul> <li>password protection for Web applications</li> </ul>	Yes
ACL - IP-based	Yes
<ul> <li>ACL - IP-based for PLC/routing</li> </ul>	Yes
<ul> <li>switch-off of non-required services</li> </ul>	Yes
<ul> <li>blocking of communication via physical ports</li> </ul>	Yes
<ul> <li>log file for unauthorized access</li> </ul>	No
product functions / time	
product function / SICLOCK support	Yes
product function / pass on time synchronization	Yes
protocol / is supported	
• NTP	Yes
standards, specifications, approvals	
reference code	
<ul> <li>according to IEC 81346-2:2019</li> </ul>	KEC
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions

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## Approvals / Certificates

General Product Approval EMV

Miscellaneous

Manufacturer Declaration





<u>KC</u>



## For use in hazardous locations

CCC-Ex





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