

product type designation

SIPLUS NET CP 1543-1

SIPLUS CP 1543-1 -40...+70 °C with conformal coating based on 6GK7543-1AX00-0XE0 Communications processor for connecting SIMATIC S7-1500 to Industrial Ethernet: TCP/IP, ISO, UDP, S7 communication, IP Broadcast/ Multicast, security (hardware identification, IP/MAC access list, firewall), Diagnostics SNMPV1/V3, DHCP, FTP client/ server, E-mail, IPV4/IPV6, Data storage on SD card of the CPU, time-of-day synchronization via NTP, Access to the Web server of the CPU; Gigabit interface 1x RJ45 (10/100/1000 MB)



Figure similar

transfer rate	
transfer rate	
<ul style="list-style-type: none"> at the 1st interface 	10 ... 1000 Mbit/s
interfaces	
number of interfaces / acc. to Industrial Ethernet	1
number of electrical connections	
<ul style="list-style-type: none"> at the 1st interface / acc. to Industrial Ethernet 	1
type of electrical connection	
<ul style="list-style-type: none"> at the 1st interface / acc. to Industrial Ethernet 	RJ45 port
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	DC
supply voltage / 1 / from backplane bus	15 V
relative symmetrical tolerance / at DC	
<ul style="list-style-type: none"> at 15 V 	3 %
consumed current	
<ul style="list-style-type: none"> from backplane bus / at DC / at 15 V / typical 	0.35 A

power loss [W]	5.3 W
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • for vertical installation / during operation 	-40 ... +40 °C
<ul style="list-style-type: none"> • for horizontally arranged busbars / during operation 	-40 ... +70 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • with condensation / acc. 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 lubricants	Yes; incl. airborne diesel and oil droplets
resistance to biologically active substances	
<ul style="list-style-type: none"> • conformity acc. to EN 60721-3-3 	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request
<ul style="list-style-type: none"> • conformity acc. to EN 60721-3-6 	Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)
resistance to chemically active substances	
<ul style="list-style-type: none"> • conformity acc. 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 style="list-style-type: none"> • conformity acc. to EN 60721-3-6 	Yes
resistance to mechanically active substances	
<ul style="list-style-type: none"> • conformity acc. 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.
<ul style="list-style-type: none"> • conformity acc. 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 / acc. 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 / acc. 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 acc. to IPC-CC-830A	Yes; Conformal coating, class A
protection class IP	IP20

design, dimensions and weights

module format	Compact module S7-1500 single width
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width	35 mm
height	142 mm
depth	129 mm
net weight	0.35 kg
mounting type	Yes
<ul style="list-style-type: none"> • S7-1500 rail mounting 	

product features, product functions, product components / general

number of units	8
<ul style="list-style-type: none"> • per CPU / maximum • note 	depending on CPU type

performance data / open communication

number of possible connections / for open communication	
<ul style="list-style-type: none"> • by means of T blocks / maximum 	118; depending on the system upper limit
amount of data	
<ul style="list-style-type: none"> • as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum 	65536 byte
number of Multicast stations	118

performance data / S7 communication

number of possible connections / for S7 communication	
<ul style="list-style-type: none"> • maximum 	118; depending on the system upper limit

performance data / multi-protocol mode

number of active connections / with multi-protocol mode	118
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performance data / IT functions

number of possible connections	
<ul style="list-style-type: none"> • as client / by means of FTP / maximum • as server / by means of FTP / maximum 	32 16
number of possible connections	
<ul style="list-style-type: none"> • as server / by means of HTTP / maximum • as e-mail client / maximum 	4 1
amount of data / as user data for email / maximum	64 Kibyte

performance data / telecontrol

protocol / is supported	
<ul style="list-style-type: none"> • TCP/IP 	Yes

product functions / management, configuration, engineering

product function / MIB support	Yes
protocol / is supported	

<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	No
configuration software	
<ul style="list-style-type: none"> • required 	STEP 7 Professional V14 (TIA Portal) or higher
identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> • I&M1 – higher-level designation/location designation 	Yes

product functions / diagnostics

product function / web-based diagnostics	Yes; via S7-1500 CPU
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product functions / routing

service / routing / note	IP routing up to 1 Mbps
product function	
<ul style="list-style-type: none"> • static IP routing 	Yes
<ul style="list-style-type: none"> • static IP routing IPv6 	No
<ul style="list-style-type: none"> • dynamic IP routing 	No
<ul style="list-style-type: none"> • dynamic IP routing IPv6 	No
protocol / is supported	
<ul style="list-style-type: none"> • RIP v1 	No
<ul style="list-style-type: none"> • RIPv2 	No
<ul style="list-style-type: none"> • RIPnG for IPv6 	No
<ul style="list-style-type: none"> • OSPFv2 	No
<ul style="list-style-type: none"> • OSPFv3 for IPv6 	No
<ul style="list-style-type: none"> • VRRP 	No
<ul style="list-style-type: none"> • VRRP for IPv6 	No
<ul style="list-style-type: none"> • BGP 	No
<ul style="list-style-type: none"> • PPP 	No
<ul style="list-style-type: none"> • PPOE via DSL 	No

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	16
product function	
<ul style="list-style-type: none"> • password protection for Web applications 	No
<ul style="list-style-type: none"> • ACL - IP-based 	No

- ACL - IP-based for PLC/routing
- switch-off of non-required services
- blocking of communication via physical ports
- log file for unauthorized access

No
Yes
No
Yes

product functions / time

product function / SICLOCK support	Yes
product function / pass on time synchronization	Yes
protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes

further information / internet-Links

Internet-Link

- to website: Selector TIA Selection Tool
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>
<http://www.siemens.com/simatic-net>
<https://mall.industry.siemens.com>
<http://www.siemens.com/industry/infocenter>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<https://support.industry.siemens.com>

security information

security information

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