

Product type designation

CP 1543-1

COMMUNICATION PROCESSOR CP 1543-1 FOR CONNECTING SIMATIC S7-1500 TO INDUSTRIAL ETHERNET; TCP/IP, ISO, UDP, S7-COMMUNICATION, IP-BROADCAST/ MULTICAST, Security (VPN, Firewall), DIAGNOSIS SNMPV1/V3, DHCP, FTP CLIENT/SERVER, E-MAIL, IPV4/IPV6, CLOCK SYNCHRONISATION VIA NTP, 1XRJ45 (10/100/1000 MBIT)



Transmission rate

Transfer rate

- at the 1st interface

10 ... 1000 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet

1

Number of electrical connections

- at the 1st interface / acc. to Industrial Ethernet

1

Type of electrical connection

- 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

- at 15 V

3 %

Consumed current

- from backplane bus / at DC / at 15 V / typical

0.35 A

Power loss [W]

5.3 W

Permitted ambient conditions	
Ambient temperature	
<ul style="list-style-type: none"> • for vertical installation / during operation 	0 ... 40 °C
<ul style="list-style-type: none"> • for horizontally arranged busbars / during operation 	0 ... 60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • 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 S7-1500 single width
Width	35 mm
Height	142 mm
Depth	129 mm
Net weight	0.35 kg
Mounting type	
<ul style="list-style-type: none"> • S7-1500 rail mounting 	Yes

Product properties, functions, components / general	
Number of units	
<ul style="list-style-type: none"> • per CPU / maximum 	8
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • Note 	depending on the system upper limit

Performance data / multi-protocol mode	
Number of active connections / with multi-protocol mode	118

Performance data / IT functions	
Number of possible connections	

• as client / by means of FTP / maximum	32
• as server / by means of FTP / maximum	16
• as server / by means of HTTP / maximum	4
• as e-mail client / maximum	1
Amount of data / as user data for email / maximum	64 Kibyte

Performance data / telecontrol

Protocol / is supported	
• TCP/IP	Yes
Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
• LLDP	No
Configuration software	
• required	STEP 7 Professional V12 (TIA Portal) or 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; yes, via S7-1500 CPU
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Product functions / Routing

Product function	
• Static IP routing	Yes
• Static IP routing IPv6	No
• dynamic IP routing	No
• dynamic IP routing IPv6	No
Protocol / is supported	
• RIP v1	No
• RIPv2	No
• RIPnG for IPv6	No
• OSPFv2	No
• OSPFv3 for IPv6	No
• VRRP	No
• VRRP for IPv6	No
• BGP	No
• PPP	No
• PPOE via DSL	No

Product functions / Security

Firewall version	stateful inspection
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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 • ACL - IP-based • ACL - IP-based for PLC/routing • switch-off of non-required services • Blocking of communication via physical ports • log file for unauthorized access 	<p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>No</p> <p>Yes</p>

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	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET 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 	<p>http://www.siemens.com/snst</p> <p>http://www.siemens.com/simatic-net</p> <p>https://mall.industry.siemens.com</p> <p>http://www.siemens.com/industry/infocenter</p> <p>http://automation.siemens.com/bilddb</p> <p>http://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>

Security information

Security information

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