

Product type designation

CP 1543-1

Communications processor CP 1543-1 for connection of SIMATIC S7-1500 to Industrial Ethernet; TCP/IP, ISO, UDP, S7 communication, IP Broadcast/ Multicast, security (VPN, Firewall) Diagnostics SNMPV1/V3, DHCP, FTP client/server, Email, IPv4/IPv6, Time synchronization via NTP, 1x RJ45 (10/100/1000 MB)



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	
• 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 S7-1500 single width
Width	35 mm
Height	142 mm
Depth	129 mm
Net weight	0.35 kg
Mounting type	
• S7-1500 rail mounting	Yes

Product properties, functions, components / general

Number of units	
• per CPU / maximum	8
• Note	depending on CPU type

Performance data / open communication

Number of possible connections / for open communication	
• by means of T blocks / maximum	118; depending on the system upper limit
Amount of data	
• 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	
• maximum	118
• Note	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	
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• as client / by means of FTP / maximum	32
• as server / by means of FTP / maximum	16
Number of possible connections	
• 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 V14 (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
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	
• password protection for Web applications	No
• ACL - IP-based	No
• ACL - IP-based for PLC/routing	No
• switch-off of non-required services	Yes
• Blocking of communication via physical ports	No
• log file for unauthorized access	Yes

Product functions / Time	
Product function / SICLOCK support	Yes
Product function / pass on time synchronization	Yes
Protocol / is supported	
• NTP	Yes

Accessories

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

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