

### 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, IEEE 802.1X (radius), time-of-day synchronization via NTP, 1x RJ45 (10/100/1000 Mbit).



### transfer rate

transfer rate

- at the 1st interface

10 ... 1000 Mbit/s

### interfaces

number of interfaces / according to Industrial Ethernet

1

number of electrical connections

- at the 1st interface / according to Industrial Ethernet

1

type of electrical connection

- at the 1st interface / according 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

### ambient conditions

ambient temperature

- for vertical installation / during operation
- for horizontally arranged busbars / during operation
- during storage
- during transport

0 ... 40 °C

0 ... 60 °C

-40 ... +70 °C

-40 ... +70 °C

relative humidity

- at 25 °C / without condensation / during operation / maximum

95 %

protection class IP

IP20

### design, dimensions and weights

module format

Compact module S7-1500 single width

width

35 mm

height

142 mm

depth

129 mm

net weight

0.35 kg

fastening method

- S7-1500 rail mounting

Yes

### product features, product functions, product components / general

number of units

- per CPU / maximum
- note

8

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
data volume	
• 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; 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	
• 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 email client / maximum	1
data volume / as user data for email / maximum	64 Kibyte

**performance data / telecontrol**

protocol / is supported	
• TCP/IP	Yes

**product functions / management, configuration, engineering**

product function / MIB support	Yes
protocol / is supported	
• SNMP v1	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	Yes
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 / 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	
• 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
number of possible connections / with VPN connection	16
product function	

<ul style="list-style-type: none"> <li>• IEEE 802.1x (radius)</li> <li>• password protection for Web applications</li> <li>• ACL - IP-based</li> <li>• ACL - IP-based for PLC/routing</li> <li>• switch-off of non-required services</li> <li>• blocking of communication via physical ports</li> <li>• log file for unauthorized access</li> </ul>	<p>Yes</p> <p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>No</p> <p>Yes</p>
<b>product functions / time</b>	
product function / SICLOCK support	No
product function / pass on time synchronization protocol / is supported	Yes
<ul style="list-style-type: none"> <li>• NTP</li> </ul>	Yes
<b>standards, specifications, approvals / hazardous environments</b>	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
<b>further information / internet-Links</b>	
<p>Internet-Link</p> <ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a></p> <p><a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></p> <p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>
<b>security information</b>	
security information	<p>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 <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <a href="http://support.automation.siemens.com">http://support.automation.siemens.com</a>. (V3.4)</p>

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