

### product type designation



### CP 1545-1

Communications processor CP 1545-1 for connection of SIMATIC S7-1500 to Industrial Ethernet; TCP/IP, UDP, S7 communication, security (VPN, firewall), SNMPv1/v3, DHCP, FTP client/server, email, IPv4/IPv6, time-of-day synchronization via NTP, connection to cloud systems via MQTT, 1x RJ45 (10/100/1000 Mbps).

transfer rate	
transfer rate	
<ul style="list-style-type: none"> <li>at the 1st interface</li> </ul>	10 ... 1000 Mbit/s
interfaces	
number of interfaces / according to Industrial Ethernet	1
number of electrical connections	
<ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>	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"> <li>at 15 V</li> </ul>	3 %
consumed current	
<ul style="list-style-type: none"> <li>from backplane bus / at DC / at 15 V / typical</li> </ul>	0.25 A
power loss [W]	3.75 W
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> <li>for vertical installation / during operation</li> <li>for horizontally arranged busbars / during operation</li> <li>during storage</li> <li>during transport</li> <li>note</li> </ul>	-30 ... +40 °C -30 ... +60 °C -40 ... +70 °C -40 ... +70 °C without condensation or icing
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	restrictions for installation altitudes > 2 000 m, see manual
relative humidity	
<ul style="list-style-type: none"> <li>at 25 °C / without condensation / during operation / maximum</li> </ul>	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	0.26 kg
fastening method	
<ul style="list-style-type: none"> <li>S7-1500 rail mounting</li> </ul>	Yes

**product features, product functions, product components / general**

number of units	
• per CPU / maximum	8
• note	depending on CPU type

**product functions / cloud connectivity**

protocol / is supported	
• Message Queuing Telemetry Transport (MQTT)	Yes
• Advanced Message Queuing Protocol (AMQP)	No
product function / for cloud connectivity	
• trigger management	Yes
• time stamping	Yes
product feature / for cloud connectivity / buffered message frame memory	No
number of data points per device / maximum	500

**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 V19 (TIA Portal) or higher
identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 - higher level designation/location designation	Yes
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022

**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



no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert.> (V4.7)

## Approvals / Certificates

General Product Approval

For use in hazardous locations



[CCC-Ex](#)

[Miscellaneous](#)



## Environment

[Confirmation](#)



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2/28/2025