

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 synchronization via NTP, 1x RJ45 (10/100/1000 Mbps).

product brand name

SIMATIC NET

Technical Product Detail Page

<https://l.siemens.com/1P6GK7543-1AX10-0XE0>

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 0.25 A

power loss [W]

3.75 W

ambient conditions

ambient temperature

- for vertical installation / during operation -30 ... +40 °C
- for horizontally arranged busbars / during operation -30 ... +60 °C
- during storage -40 ... +70 °C
- during transport -40 ... +70 °C
- note 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

- 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	0.26 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
performance data / IT functions	
number of possible connections	
• as client / by means of FTP / maximum • as server / by means of FTP / maximum	32 16
number of possible connections	
• as server / by means of HTTP / maximum • as email client / maximum	4 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 • SNMP v3 • DCP • LLDP	Yes Yes Yes Yes
configuration software	
• required	STEP 7 Professional V19 (TIA Portal) or higher
identification & maintenance function	
• I&M0 - device-specific information • I&M1 - higher level designation/location designation	Yes 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
product functions / routing	
service / routing / note	IP routing up to 1 Mbps
product function	
• static IP routing • static IP routing IPv6 • dynamic IP routing • dynamic IP routing IPv6	Yes No No No
protocol / is supported	
• RIP v1 • RIPv2 • RIPnG for IPv6 • OSPFv2 • OSPFv3 for IPv6 • VRRP	No No No No No No

• VRRP for IPv6 • BGP • PPP • PPOE via DSL	No No No 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, SHA-256, SHA-384, SHA-512
number of possible connections / with VPN connection	16
product function • IEEE 802.1x (radius) • 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	Yes No No No Yes No Yes
product functions / time	
product function / SICLOCK support	No
product function / pass on time synchronization	Yes
protocol / is supported • NTP	Yes
standards, specifications, approvals	
certificate of suitability / CE marking	Yes
certificate of suitability / UKCA marking	Yes
certificate of suitability / cULus approval	Yes
certificate of suitability / KC approval	Yes
certificate of suitability / Regulatory Compliance Mark (RCM)	Yes
certificate of suitability / RoHS conformity	Yes
certificate of suitability / EAC approval	Yes
standards, specifications, approvals / hazardous environments / header	
certificate of suitability / ATEX	Yes
certificate of suitability / IECEx	Yes
certificate of suitability / ULhazloc approval	Yes
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
certificate of suitability / FM registration	Yes
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq] • total • during manufacturing • during operation • after end of life	140.88 kg 21.24 kg 119.29 kg 0.35 kg
further information / internet links	
internet link • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAX-Download-Manager • to website: Industry Online Support	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://siemens.com/cax https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic,

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Approvals / Certificates					
General Product Approval					EMV
		China RoHS			Miscellaneous
For use in hazardous locations					Maritime application
	FM	CCC-Ex		Miscellaneous	
Maritime application	Environment				
NK / Nippon Kaiji Kyokai					

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