SIEMENS

Data sheet 6GK7543-1AX10-0XE0

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	0.25 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	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
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	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
identification & maintenance function	
● I&M0 - device-specific information	Yes
● I&M1 - higher level designation/location designation	Yes
product function / is supported / identification link	Yes; according 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	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, SHA-256, SHA-384, SHA-512
number of possible connections / with VPN connection	16
product function	
● IEEE 802.1x (radius)	Yes
● 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	No
product function / pass on time synchronization	Yes
protocol / is supported	
● NTP	Yes
standards, specifications, approvals	
reference code	
● according to IEC 81346-2:2019	KEC
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
● total	140.88 kg
● during manufacturing	21.24 kg
● during operation	119.29 kg
● after end of life	0.35 kg
further information / internet links	
internet link	
● 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	
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, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are 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		
UKCA	CE EG-Konf.	IECEx IECEx	CCC-Ex Miscellaneous ATEX

Environment