SIEMENS

Data sheet

6GK7543-1AX00-0XE0

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	0.35 A	
power loss [W]	5.3 W	
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 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	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	Tro, depending on the system apper innit
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	The state of the s
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 server / by means of HTTP / maximum as email client / maximum	1
	64 Kibyte
performance data / telecontrol	INDYIC
protocol / is supported	V
TCP/IP veduat functions / management configuration engineering	Yes
product functions / management, configuration, engineering	V
product function / MIB support	Yes
protocol / is supported	v.
	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	Yes
	163
configuration software	
configuration software • required	STEP 7 Professional V14 (TIA Portal) or higher
configuration software • required identification & maintenance function	STEP 7 Professional V14 (TIA Portal) or higher
configuration software • required identification & maintenance function • I&M0 - device-specific information	STEP 7 Professional V14 (TIA Portal) or higher Yes
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation	STEP 7 Professional V14 (TIA Portal) or higher
configuration software • required identification & maintenance function • I&M0 - device-specific information	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics	STEP 7 Professional V14 (TIA Portal) or higher Yes
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes; via S7-1500 CPU
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes; via S7-1500 CPU
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No No
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing IPv6 • dynamic IP routing IPv6	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No No
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing IPv6 protocol / is supported	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No No No
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing IPv6 protocol / is supported • RIP v1	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No No No No No
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing IPv6 protocol / is supported • RIP v1 • RIPv2	Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No No No No
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing • dynamic IP routing IPv6 protocol / is supported • RIP v1 • RIPv2 • RIPnG for IPv6	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No No No No No No No
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing • dynamic IP routing IPv6 protocol / is supported • RIP v1 • RIPv2 • RIPnG for IPv6 • OSPFv2	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software • required identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation product functions / diagnostics product function / web-based diagnostics product functions / routing service / routing / note product function • static IP routing • static IP routing IPv6 • dynamic IP routing • dynamic IP routing IPv6 protocol / is supported • RIP v1 • RIPv2 • RIPnG for IPv6 • OSPFv2 • OSPFv3 for IPv6 • VRRP • VRRP for IPv6 • BGP	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes: Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No
configuration software	STEP 7 Professional V14 (TIA Portal) or higher Yes Yes Yes; via S7-1500 CPU IP routing up to 1 Mbps Yes No

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 / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
as marking	Ex nA IIC T4 Gc
further information / internet links	
internet link	
 to web page: selection aid TIA Selection Tool 	http://www.siemens.com/tia-selection-tool
 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
security information	
security information	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 http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.automation.siemens.com. (V3.4)

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