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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, Time synchronization via NTP, 1x RJ45 (10/100/1000 MB)

Transmission rate

Transfer rate	
• at the 1st interface	10 ... 1000 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
• at the 1st interface / acc. to Industrial Ethernet	1
Type of electrical connection	
• at the 1st interface / acc. 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 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 weight	
Module format	Compact module S7-1500 single width
Width	35 mm
Height	142 mm
Depth	129 mm
Net weight	0.35 kg
Mounting type	
• S7-1500 rail mounting	Yes

Product properties, functions, 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
Amount of data	
• 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
• Note	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	

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• 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 e-mail client / maximum	1
Amount of data / as user data for email / maximum	64 Kibyte

Performance data / telecontrol

Protocol / is supported	
• TCP/IP	Yes

Product functions / management, configuration

Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
• LLDP	No
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 / Diagnosis

Product function / Web-based diagnostics	Yes; 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
Number of possible connections / with VPN connection	16
Product function	
• 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	Yes
Product function / pass on time synchronization	Yes
Protocol / is supported	
• NTP	Yes

Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• 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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