

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)



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 / acc. to Industrial Ethernet	1
number of electrical connections	
<ul style="list-style-type: none"> <li>at the 1st interface / acc. to Industrial Ethernet</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / acc. 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>	0.35 A
power loss [W]	5.3 W
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> <li>for vertical installation / during operation</li> </ul>	0 ... 40 °C
<ul style="list-style-type: none"> <li>for horizontally arranged busbars / during operation</li> </ul>	0 ... 60 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-40 ... +70 °C
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	0.35 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	

<ul style="list-style-type: none"> <li>• per CPU / maximum</li> <li>• note</li> </ul>	8 depending on CPU type
<b>performance data / open communication</b>	
number of possible connections / for open communication <ul style="list-style-type: none"> <li>• by means of T blocks / maximum</li> </ul>	118; depending on the system upper limit
data volume <ul style="list-style-type: none"> <li>• as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum</li> </ul>	65536 byte
number of Multicast stations	118
<b>performance data / S7 communication</b>	
number of possible connections / for S7 communication <ul style="list-style-type: none"> <li>• maximum</li> </ul>	118; depending on the system upper limit
<b>performance data / multi-protocol mode</b>	
number of active connections / with multi-protocol mode	118
<b>performance data / IT functions</b>	
number of possible connections <ul style="list-style-type: none"> <li>• as client / by means of FTP / maximum</li> <li>• as server / by means of FTP / maximum</li> </ul>	32 16
number of possible connections <ul style="list-style-type: none"> <li>• as server / by means of HTTP / maximum</li> <li>• as email client / maximum</li> </ul>	4 1
data volume / as user data for email / maximum	64 Kibyte
<b>performance data / telecontrol</b>	
protocol / is supported <ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>	Yes
<b>product functions / management, configuration, engineering</b>	
product function / MIB support	Yes
protocol / is supported <ul style="list-style-type: none"> <li>• SNMP v1</li> <li>• DCP</li> <li>• LLDP</li> </ul>	Yes Yes No
configuration software <ul style="list-style-type: none"> <li>• required</li> </ul>	STEP 7 Professional V14 (TIA Portal) or higher
identification & maintenance function <ul style="list-style-type: none"> <li>• I&amp;M0 - device-specific information</li> <li>• I&amp;M1 – higher level designation/location designation</li> </ul>	Yes Yes
<b>product functions / diagnostics</b>	
product function / web-based diagnostics	Yes; via S7-1500 CPU
<b>product functions / routing</b>	
service / routing / note	IP routing up to 1 Mbps
product function <ul style="list-style-type: none"> <li>• static IP routing</li> <li>• static IP routing IPv6</li> <li>• dynamic IP routing</li> <li>• dynamic IP routing IPv6</li> </ul>	Yes No No No
protocol / is supported <ul style="list-style-type: none"> <li>• RIP v1</li> <li>• RIPv2</li> <li>• RIPnG for IPv6</li> <li>• OSPFv2</li> <li>• OSPFv3 for IPv6</li> <li>• VRRP</li> <li>• VRRP for IPv6</li> <li>• BGP</li> <li>• PPP</li> <li>• PPoE via DSL</li> </ul>	No No No No No No No No No No
<b>product functions / security</b>	

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
<b>product functions / time</b>	
product function / SICLOCK support	Yes
product function / pass on time synchronization	Yes
protocol / is supported	
• NTP	Yes
<b>further information / internet-Links</b>	
Internet-Link	
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
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 <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a> . To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <a href="http://support.automation.siemens.com">http://support.automation.siemens.com</a> . (V3.4)

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