## SIEMENS

Product data sheet

Product-type designation	CP 1543-1
	COMMUNICATION PROCESSOR CP 1543-1 FOR CONNECTING SIMATIC S7-1500 TO INDUSTRIAL ETHERNET: TCP/IP, ISO, UDP, S7- COMMUNICATION, IP-BROADCAST/ MULTICAST, SECURITY (HARDWARE- IDENTIFICATION, IP/MAC ACCESS LIST, FIREWALL), DIAGNOSIS SNMPV1/V3, DHCP, FTP CLIENT/ SERVER, E-MAIL, IPV4/IPV6, DATA STORAGE ON SD CARD OF CPU, CLOCK SYNCHRONISATION VIA NTP, ACCESS TO WEBSERVER OF CPU; GIGABIT-SS 1XRJ45 (10/100/1000 MBIT)
Transmission rate	
Transfer rate	
• at the interface 1	10 … 1000 Mbit/s
Interfaces	
Number of electrical connections	
• at interface 1 / in accordance with Industrial Ethernet	1
Design of electrical connection	
• at interface 1 / in accordance with Industrial Ethernet	RJ45 port
Supply voltage, current consumption, power loss	
Type of / supply voltage	DC
Supply voltage / 1 / from backplane bus	15 V
Relative symmetrical tolerance / at 15 V / with DC	3 %
Current consumption / from backplane bus / at 15 V / with DC / typical	0.35 A
Resistive loss	5.3 W
Permitted ambient conditions	
Ambient temperature	
<ul> <li>for vertical installation / during operating phase</li> </ul>	0 40 °C
<ul> <li>for horizontal installation / during operating phase</li> </ul>	0 60 °C

Relave hunding dampart         Relave hunding value           Relave hunding value         SS %           Protection class IP         De30           Protection class IP         Compact module S7-1500 single width           Middle format.         Compact module S7-1500 single width           Width         35 mm           Height         142 nm           Height         0.35 kg           Net weight         0.35 kg           Number of modules         Versite           Porture topoles, functions, components / general         Versite           Number of modules         0           - per CPU / maximum         8           - note         depending on CPU type           Porture of add / open communication / bg         18           Number of possible connections / for open communication / via T         depending on the system upper limit           Ordical / Sommanne         6536 byte           Number of possible connections / for open communication / via T         depending on the system upper limit           - note         depending on the system upper limit	during transport	-40 +70 °C
/ maximumBitProtection class IPB20Design: dimensions and weightCompact module S7:1500 single widthWidth35 mmHeight142 mmBegth35 kgNet weight035 kgMounting type / S7:1500 rail mountingVisProtect properties, functions, components / generalNumer of modules6• per CPU / maximum8• one of possible connections / for open communication / bymaster of possible connections / for open communication / bymaster of possible connections / for open communication / bynumber of possible connections / for open communication / bynumber of possible connections / for open communication / bynumber of possible connections / for open communication / bynumber of possible connections / for open communication / bynumber of possible connections / for S7 communicationNumber of Multicast stationsNumber of Multicast stat		
Design, dimensions and weight         Compact module S7-1500 single width           Module format.         Compact module S7-1500 single width           Width         35 mm           Height         142 mm           Depth         0.35 kg           Mounting type / S7-1500 rail mounting         Yes           Product properties, functions, components / general         Number of modules           • err CPU / maximum         8           • note         depending on CPU type           Performance data / open communication / via T-         depending on the system upper limit           modules / comment         8           • note         depending on the system upper limit           modules / comment         beside connections / for open communication / via T-           modules / comment         118           Data volume / as user data per ISO on TCP connection / for open communication         118           ender of possible connections / for S7 communication         118           • note         depending on the system upper limit           • note         depending on the system upper limit           • note of data / S7 communication         118           • note of possible connections / with multiprotocol mode         118           Performance data / S1 functione         22		
Module format.Compact module S7-1500 single widthWidth35 mmHeight142 mmDepth129 mmNet weight0.35 kgMounting type / S7-1500 rail mountingYesProduct properties, functions, components / general*********************************	Protection class IP	IP20
With35 mmHeight142 mmDepth29 mmNat weight0.35 kgMounting type / S7.1500 rail mountingvsProduct properties, functions, components / generalvsProduct properties, functions, components / generaldepending on CPU typeProduct properties, functions, components / generaldepending on CPU typeProduct properties, functions, components / generaldepending on CPU typeProduct properties, functions, for open communication / byfileNumber of possible connections / for open communication / bitdepending on the system upper limitProduct commentdepending on the system upper limitData volume / a user data per ISO on TCP connection / for opendepending on the system upper limitProduct surger data per ISO on TCP connection / for opendepending on the system upper limitData volume / a user data per ISO on TCP connection / for opendepending on the system upper limitProduct prostible connections / for S7 communicationlisNumber of possible connections / for S7 communicationlis• notedepending on the system upper limit• notedepending on the system upper limit <td< td=""><td>Design, dimensions and weight</td><td></td></td<>	Design, dimensions and weight	
Height142 mmDepth29 mmNetweight33 kgNumber Syr Syr Stor ani mountingVePorture structions, components / generalNumber of modulesgeneraling on CPU type• per CPU / maximum8• or ofgeneraling on CPU typePerformance data / open communication / by means of T blocks / maximumfileNumber of possible connections / for open communication / via To means of T blocks / maximumgeneraling on the system upper limitNumber of possible connections / for open communication / via To means of T blocks / maximumgeneraling on the system upper limitNumber of suble connections / for open communication / via To means of T blocks / maximumgeneraling on the system upper limitNumber of suble connections / for Open notion / for open communication / by means of T blocks / maximumfileNumber of Multicest status118Performance data / S7 communicationfile• nakimumite• nakimumite <t< td=""><td>Module format</td><td>Compact module S7-1500 single width</td></t<>	Module format	Compact module S7-1500 single width
Depth129 mmNetweight0.35 kgNorthing type / S7.1500 rail mountingvsProduct properties, functions, components / generalNumber of modulesagending on CPU typePerformance dela / open communication / byagending on CPU typePerformance dela / open communication / via Tagending on the system upper limitnumber of possible connections / for open communication / via Tagending on the system upper limitnumber of possible connections / for open communication / via Tagending on the system upper limitnumber of possible connections / for open communication / via Tagending on the system upper limitNumber of possible connections / for Open communication / via Tagending on the system upper limitNumber of Mulicast stationsagending on the system upper limitNumber of Mulicast stationsagending on the system upper limitNumber of Mulicast stationsagending on the system upper limit• naximumagending on the system upper limit• naximumagending on the system upper limit• nakimumagending on the system upper limit• noteagending on the system upper limit• nakimumagending on the system upper limit• noteagending on the system	Width	35 mm
r0.35 kgMounting type / S7-1500 rail mountingYesProduct properties, functions, components / general8• per CPU / maximum8• per CPU / maximum18• notedepending on CPU typePerformance data / open communication / by means of T blocks / maximum18Number of possible connections / for open communication / via T- modules / commentdepending on the system upper limitNumber of possible connections / for open communication / via T- module / commentdepending on the system upper limitNumber of possible connections / for open communication / via T- modules / commentdepending on the system upper limitNumber of possible connections / for open communication / via T- modules / commentdepending on the system upper limitNumber of Sociable connections / for open communication / via T- modules / commentdepending on the system upper limitNumber of Multicast stations18Number of Multicast stations118Performance data / S7 communicationdepending on the system upper limit• notedepending on the system upper limit• of the system sof FTP / maximum<	Height	142 mm
Mounting type / S7-1500 rail mounting         Yes           Product properties, functions, components / general         Image: CPU / maximum         8           • per CPU / maximum         8         depending on CPU type           Performance data / open communication         118         Image: Commentions / for open communication / by means of T blocks / maximum         depending on the system upper limit           number of possible connections / for open communication / via T-modules / comment         depending on the system upper limit           number of possible connections / for open communication / via T-modules / comment         depending on the system upper limit           Number of possible connections / for open communication / via T-modules / comment         depending on the system upper limit           Data volume / Sto user data per ISO on TCP connection / for open communication / by means of T blocks / maximum         18           Performance data / ST communication         18           nonter of possible connections / for ST communication         depending on the system upper limit           Performance data / multi-protocol mode         118           nonter of possible connections / with multiprotocol mode         118           Number of active connections / with multiprotocol mode         118           via ser off ITP / maximum         32           • as clent / by means of FTP / maximum         32           • as endici	Depth	129 mm
Product properties, functions, components / general           Number of modules         s           • per CPU / maximum         8           • note         depending on CPU type           Performance data / open communication         118           means of T blocks / maximum         depending on the system upper limit           modules / comment         65536 byte           Data volume / as user data per ISO on TCP connection / for open communication / via T- modules / comment         65536 byte           Number of possible connections / for open communication / via T- modules / sommunication / by means of T blocks / maximum         118           Performance data / S7 communication         5536 byte           Number of possible connections / for S7 communication         -           • maximum         118           • note         depending on the system upper limit           Performance data / S7 communication         -           • maximum         118           • note         depending on the system upper limit           Performance data / multi-protocol mode         118           Number of possible connections         -           • as client / by means of FTP / maximum         32           • as server         -           • by means of FTP / maximum         16           • by mean	Net weight	0.35 kg
Number of modules         8           • per CPU / maximum         8           • note         depending on CPU type           Performance data / open communication         118           Number of possible connections / for open communication / via T- modules / comment         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 possible connections / for open communication         118           Performance data / S7 communication         65536 byte           Number of possible connections / for S7 communication         118           Performance data / S7 communication         118           • note         depending on the system upper limit           • maximum         118           • note         depending on the system upper limit           Performance data / Turtiprotocol mode         118           Number of possible connections / for S7 communication         118           • note         depending on the system upper limit           Performance data / Turtiprotocol mode         118           Number of possible connections         32           • as client / by means of FTP / maximum         16           • by means of FTP / maximum         12           • by means	Mounting type / S7-1500 rail mounting	Yes
• per CPU / maximum8• notedepading on CPU typePerformance data / pen communication / by means of T blocks / maximum118Number of possible connections / for open communication / by means of T blocks / maximum6536 byteData volume / as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum6536 byteNumber of Multicast stations18Performance data / S7 communication18Performance data / S7 communication18• namimum18• namimum18• namimum18• notedepending on the system upper limit• namimum18• notedepending on the system upper limit• namimum18• notedepending on the system upper limit• note18Performance data / Infunctions18Performance data / Infunctions18• scient / by means of FTP / maximum18• scient / by means of FTP / maximum2• scient / by means of FTP / maximum12• scient / by means of FTP / maximum14• server-• sy means of FTP / maximum16• server-• scient / by means of FTP / maximum16• server-• by means of FTP / maximum4• server-• by means of FTP / maximum4• concut of data a useful data for e-mail / maximum4• concut of data a useful data for e-mail / maximum4• concut of data a useful	Product properties, functions, components / general	
· notedepending on CPU typePerformance data / open communication / by means of T blocks / maximum118Number of possible connections / for open communication / by means of T blocks / maximum6536 byteData volume / as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum6536 byteData volume / as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum18Performance data / S7 communication18Performance data / S7 communication18Number of possible connections / for S7 communication18• naximum118• naximum118• notedepending on the system upper limit• naximum118• note18Performance data / ITf functions18Performance data / ITf functions18• sa client / by means of FTP / maximum2• as client / by means of FTP / maximum2• by means of FTP / maximum2• by means of FTP / maximum16• as enveri1• by means of FTP / maximum4• by means of FTP / maximum4• by means of HTTP / maximum4• by means of HTTP / maximum18• concut of data / as useful data for e-mail / maximum4• by means of FTP / maximum4• by means of FTP / maximum4• by means of HTTP / maximum4• by means of HTTP / maximum18• concut of data / as useful data for e-mail / maximum4• con	Number of modules	
Performance data / open communication         Number of possible connections / for open communication / by         118           number of possible connections / for open communication / via T- modules / comment         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 Muticast stations         118           Performance data / S7 communication         118           Number of Jossible connections / for S7 communication         4000000000000000000000000000000000000	• per CPU / maximum	8
Number of possible connections / for open communication / by means of T blocks / maximum18number of possible connections / for open communication / via T- modules / commentdepending on the system upper limitData volume / as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum65536 byteNumber of Muticast stations18Performance data / S7 communication18	• note	depending on CPU type
means of T blocks / maximum         Generating on the system upper limit           number of possible connections / for open communication / via T- modules / comment         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         desta volume / as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum           Number of Multicast stations         118           Performance data / S7 communication	Performance data / open communication	
modules / comment         G5536 byte           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         -           • maximum         118           • note         depending on the system upper limit           • note         depending on the system upper limit           Performance data / multi-protocol mode         118           Number of active connections / with multiprotocol mode         128           Number of active connections / with multiprotocol mode         138           Performance data / IT functions         138           Number of possible connections         138           Number of possible connections         138           est dient / by means of FTP / maximum         32           • as dient / by means of FTP / maximum         32           • by means of FTP / maximum         4           • by means of FTP / maximum         4           • by means of HTTP / maximum         4           • by means of HTTP / maximum         6 Kibyte           • as e-mail client / maximum         6 Kibyte           • as e-mail client / maximum         6 Kibyte           Product function / MIB support <td></td> <td>118</td>		118
communication / by means of T blocks / maximumInallaNumber of Multicast stations118Performance data / S7 communicationmaximum118maximumdepending on the system upper limitnotedepending on the system upper limitPerformance data / multi-protocol mode-Number of active connections / with multiprotocol mode118Performance data / IT functions-Number of possible connectionss client / by means of FTP / maximum32s serverby means of FTP / maximum16s serverby means of FTP / maximum4by means of HTTP / maximum5by means of HTTP / maximum5by means of HTTP / maximum4by means of HTTP / maximum6by means of HTTP / maximum6<		depending on the system upper limit
Performance data / S7 communicationImage: Second Secon		65536 byte
Number of possible connections / for S7 communicationI18• maximumtagending on the system upper limit• notedepending on the system upper limitPerformance data / multi-protocol mode118Number of active connections / with multiprotocol mode118Performance data / IT functions12Number of possible connections32• as client / by means of FTP / maximum32• by means of FTP / maximum16• by means of FTP / maximum16• by means of HTTP / maximum4• by means of HTTP / maximum64 Kibyte• roduct functions / management, configuration64 KibyteProduct function / MIB supportYesProduct function / MIB supportYes	Number of Multicast stations	118
• naximum118• notedepending on the system upper limitPerformance data / multi-protocol modeHassemu per limitNumber of active connections / with multiprotocol mode118Performance data / IT functionsJassemu per limitNumber of possible connectionsJassemu per limit• as client / by means of FTP / maximum32• by means of FTP / maximum16• by means of HTTP / maximum16• by means of HTTP / maximum1• by means of HTTP / maximum4• by means of HTTP / maximum4• by means of HTTP / maximum4• by means of HTTP / maximum1• by means of HTTP / maximum4• by means of HTTP / maximum4• by means of HTTP / maximum1• by means of HTTP / maximum1• by means of HTTP / maximum1• by means of HTTP / maximum4• by means of HTTP / maximum1• by means of HTTP / maximu	Performance data / S7 communication	
• notedepending on the system upper limitPerformance data / multi-protocol modeHereinNumber of active connections / with multiprotocol mode118Performance data / IT functions	Number of possible connections / for S7 communication	
Performance data / multi-protocol mode       Instructions         Number of active connections / with multiprotocol mode       118         Performance data / IT functions       Instructions         Number of possible connections       32         • as client / by means of FTP / maximum       32         • by means of FTP / maximum       16         • by means of FTP / maximum       4         • by means of FTP / maximum       1         • by means of FTP / maximum       4         • by means of HTTP / maximum       4         • as e-mail client / maximum       4         • as e-mail client / maximum       64 Kibyte         Product functions / management, configuration       Froduct function / MIB support         Product function / MIB support       Yes         Product function / MIB support       Yes	• maximum	118
Number of active connections / with multiprotocol mode       118         Performance data / IT functions       -         Number of possible connections       -         Number of possible connections       32         • as client / by means of FTP / maximum       32         • by means of FTP / maximum       16         • by means of FTP / maximum       4         • by means of HTTP / maximum       1         • as e-mail client / maximum       1         • as e-mail client / maximum       64 Kibyte         Product functions / management, configuration       64 Kibyte	• note	depending on the system upper limit
Performance data / IT functionsImage: Second Se	Performance data / multi-protocol mode	
Number of possible connectionsas client / by means of FTP / maximum32• as server-• by means of FTP / maximum16• by means of HTTP / maximum4• as e-mail client / maximum1• as e-mail client / maximum64 KibyteProduct functions / management, configuration48Product function / MIB supportYesProtocol / is supportedYes	Number of active connections / with multiprotocol mode	118
• as client / by means of FTP / maximum32• as server-• by means of FTP / maximum16• by means of HTTP / maximum4• as e-mail client / maximum1• as e-mail client / maximum64 Kibyte• Amount of data / as useful data for e-mail / maximum64 Kibyte• Product functions / management, configurationYes• Product function / MIB supportYes• Protocol / is supported	Performance data / IT functions	
• as server·• by means of FTP / maximum16• by means of HTTP / maximum4• as e-mail client / maximum1Amount of data / as useful data for e-mail / maximum64 KibyteProduct functions / management, configurationYesProduct function / MIB supportYesProtocol / is supportedYes	Number of possible connections	
• by means of FTP / maximum16• by means of HTTP / maximum4• as e-mail client / maximum1• as e-mail client / maximum64 KibyteAmount of data / as useful data for e-mail / maximum64 KibyteProduct functions / management, configurationProduct function / MIB supportYesProtocol / is supported1	<ul> <li>as client / by means of FTP / maximum</li> </ul>	32
<ul> <li>by means of HTTP / maximum</li> <li>by means of HTTP / maximum</li> <li>as e-mail client / maximum</li> <li>Amount of data / as useful data for e-mail / maximum</li> <li>64 Kibyte</li> <li>Product functions / management, configuration</li> <li>Product function / MIB support</li> <li>Protocol / is supported</li> </ul>	as server	
• as e-mail client / maximum1Amount of data / as useful data for e-mail / maximum64 KibyteProduct functions / management, configurationProduct function / MIB supportProduct function / MIB supportYesProtocol / is supportedImage: Support Suppo	• by means of FTP / maximum	16
Amount of data / as useful data for e-mail / maximum     64 Kibyte       Product functions / management, configuration     97 Yes       Product function / MIB support     Yes       Protocol / is supported     100 Yes	by means of HTTP / maximum	4
Product functions / management, configuration       Product function / MIB support       Protocol / is supported	• as e-mail client / maximum	1
Product function / MIB support Yes Protocol / is supported	Amount of data / as useful data for e-mail / maximum	64 Kibyte
Protocol / is supported	Product functions / management, configuration	
	Product function / MIB support	Yes
• SNMP v1 Yes	Protocol / is supported	
	• SNMP v1	Yes

• DCP	Yes
• LLDP	No
Configuration software / required	STEP 7 Professional V12 (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
Product functions / Security	
Design of the firewall	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 / for VPN connection	16
Product function	
password protection for Web applications	No
ACL - IP-based	No
ACL - IP-based for PLC/routing	No
switchoff of non-required services	Yes
<ul> <li>blocking of communication via physical ports</li> </ul>	No
log file for unauthorized access	Yes
Product functions / Time	
Product function	
SICLOCK support	Yes
pass on time synchronization	Yes
Protocol / is supported / NTP	Yes
Further Information / Internet Links	
Internet-Link	
• to website: Industry Mall	http://www.siemens.com/industrial-controls/mall
to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Information and Download Center	http://www.siemens.com/automation/net/catalog
• to website: Image database	http://automation.siemens.com/bilddb
to website: CAx Download Manager	http://www.siemens.com/cax
to website: Industry Online Support	http://support.automation.siemens.com
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-theart 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)

Aug 7, 2014

letzte Änderung: