# SIEMENS

| 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 | |
| ● 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 |
| 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 / 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 / hazardous environments

| certificate of suitability / CCC / for hazardous zone according to GB standard | Yes; GB3836.1, GB3836.8 |
|---|---|
| ● 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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**last modified:** 11/9/2023