

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)



Transfer 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 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 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 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 |
| 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; 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 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, engineering

| | |
|--|--|
| 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 / 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 |
| 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

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