

product type designation



CP 343-1

Communications processor CP 343-1 for connection of SIMATIC S7-300 to Industrial Ethernet via ISO and TCP/IP, PROFINET IO controller or PROFINET IO device, integrated 2-port switch ERTEC 200, S7 communication, fetch/write, SEND/RECEIVE RFC1006, multicast, DHCP, NTC- CPU sync, with and without diagnostics, initialization via LAN, 2x RJ45 connection for LAN with 10/100 Mbit/s.

transfer rate

| | |
|--|-------------------|
| transfer rate | |
| <ul style="list-style-type: none"> at the 1st interface | 10 ... 100 Mbit/s |

interfaces

| | |
|---|--------------------------------|
| number of interfaces / according to Industrial Ethernet | 2 |
| number of electrical connections | |
| <ul style="list-style-type: none"> at the 1st interface / according to Industrial Ethernet for power supply | 2 1 |
| type of electrical connection | |
| <ul style="list-style-type: none"> of Industrial Ethernet interface at the 1st interface / according to Industrial Ethernet | RJ45 port RJ45 port |
| type of electrical connection | |
| <ul style="list-style-type: none"> for power supply | 2-pole plugable terminal block |

supply voltage, current consumption, power loss

| | |
|---|--------------------------|
| type of voltage / of the supply voltage | DC |
| supply voltage / 1 / from backplane bus | 5 V |
| supply voltage | 24 V |
| supply voltage / external | 24 V |
| supply voltage / external / at DC / rated value | 24 V |
| relative positive tolerance / at DC / at 24 V | 20 % |
| relative negative tolerance / at DC / at 24 V | 15 % |
| consumed current | |
| <ul style="list-style-type: none"> from backplane bus / at DC / at 5 V / typical from external supply voltage / at DC / at 24 V / typical from external supply voltage / at DC / at 24 V / maximum | 0.2 A 0.16 A 0.2 A |
| power loss [W] | 5.8 W |

ambient conditions

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|--|--|
| ambient temperature | |
| <ul style="list-style-type: none"> for vertical installation / during operation for horizontally arranged busbars / during operation during storage during transport | 0 ... 40 °C 0 ... 60 °C -40 ... +70 °C -40 ... +70 °C |
| relative humidity | |
| <ul style="list-style-type: none"> at 25 °C / without condensation / during operation / maximum | 95 % |
| protection class IP | IP20 |

design, dimensions and weights

| | |
|---------------|------------------------------------|
| module format | Compact module S7-300 single width |
|---------------|------------------------------------|

| | |
|--|---------|
| width | 40 mm |
| height | 125 mm |
| depth | 120 mm |
| net weight | 0.22 kg |
| fastening method | Yes |
| <ul style="list-style-type: none"> • S7-300 rail mounting | Yes |

performance data / open communication

| | |
|---|----------|
| number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum data volume | 16 |
| <ul style="list-style-type: none"> • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum | 8 Kibyte |
| <ul style="list-style-type: none"> • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum | 8 Kibyte |
| <ul style="list-style-type: none"> • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum | 8 Kibyte |
| <ul style="list-style-type: none"> • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum | 2 Kibyte |
| number of Multicast stations | 16 |

performance data / S7 communication

| | |
|---|----|
| number of possible connections / for S7 communication | 16 |
| <ul style="list-style-type: none"> • maximum | 16 |

performance data / multi-protocol mode

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|---|----|
| number of active connections / with multi-protocol mode | 32 |
|---|----|

performance data / PROFINET communication / as PN IO controller

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|--|-----------|
| number of PN IO devices / on PROFINET IO controller / operable / total | 32 |
| number of external PN IO lines / with PROFINET / per rack | 1 |
| data volume | |
| <ul style="list-style-type: none"> • as user data for input variables / as PROFINET IO controller / maximum | 1 Kibyte |
| <ul style="list-style-type: none"> • as user data for output variables / as PROFINET IO controller / maximum | 1 Kibyte |
| <ul style="list-style-type: none"> • as user data for input variables per PN IO device / as PROFINET IO controller / maximum | 1433 byte |
| <ul style="list-style-type: none"> • as user data for output variables per PN IO device / as PROFINET IO controller / maximum | 1433 byte |
| <ul style="list-style-type: none"> • as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum | 240 byte |
| <ul style="list-style-type: none"> • as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum | 240 byte |

performance data / PROFINET communication / as PN IO device

| | |
|---|----------|
| product function / PROFINET IO device | Yes |
| data volume | |
| <ul style="list-style-type: none"> • as user data for input variables / as PROFINET IO device / maximum | 512 byte |
| <ul style="list-style-type: none"> • as user data for output variables / as PROFINET IO device / maximum | 512 byte |
| <ul style="list-style-type: none"> • as user data for input variables / for each sub-module as PROFINET IO device | 240 byte |
| <ul style="list-style-type: none"> • as user data for output variables / for each sub-module as PROFINET IO device | 240 byte |
| <ul style="list-style-type: none"> • as user data for the consistency area for each sub-module | 240 byte |
| number of submodules / per PROFINET IO-Device | 32 |

performance data / telecontrol

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| protocol / is supported | Yes |
| <ul style="list-style-type: none"> • TCP/IP | Yes |

product functions / management, configuration, engineering

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|--------------------------------|-----|
| product function / MIB support | Yes |
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|--|---|
| protocol / is supported | |
| • SNMP v1 | Yes |
| • DCP | Yes |
| • LLDP | Yes |
| configuration software | |
| • required | STEP 7 V5.4 SP2 or higher / STEP 7 Professional V11 (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 |
| product functions / switch | |
| product feature / switch | Yes |
| product function | |
| • switch-managed | No |
| • with IRT / PROFINET IO switch | Yes |
| • configuration with STEP 7 | Yes |
| product functions / redundancy | |
| product function | |
| • ring redundancy | Yes |
| • redundancy manager | No |
| protocol / is supported / Media Redundancy Protocol (MRP) | Yes |
| product functions / security | |
| product function | |
| • password protection for Web applications | No |
| • ACL - IP-based | Yes |
| • ACL - IP-based for PLC/routing | No |
| • switch-off of non-required services | Yes |
| • blocking of communication via physical ports | Yes |
| • log file for unauthorized access | No |
| product functions / time | |
| product function / SICLOCK support | Yes |
| 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 |
| 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 | |
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