

### 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"> <li>at the 1st interface</li> </ul>  | 10 ... 100 Mbit/s  |
| interfaces  |  |
| number of interfaces / according to Industrial Ethernet   | 2  |
| number of electrical connections  |  |
| <ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> <li>for power supply</li> </ul>   | 2<br>1   |
| type of electrical connection   |  |
| <ul style="list-style-type: none"> <li>of Industrial Ethernet interface</li> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>   | RJ45 port<br>RJ45 port   |
| type of electrical connection   |  |
| <ul style="list-style-type: none"> <li>for power supply</li> </ul>  | 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"> <li>from backplane bus / at DC / at 5 V / typical</li> <li>from external supply voltage / at DC / at 24 V / typical</li> <li>from external supply voltage / at DC / at 24 V / maximum</li> </ul> | 0.2 A<br>0.16 A<br>0.2 A                                       |
| power loss [W]  | 5.8 W  |
| ambient conditions  |  |
| ambient temperature   |  |
| <ul style="list-style-type: none"> <li>for vertical installation / during operation</li> <li>for horizontally arranged busbars / during operation</li> <li>during storage</li> <li>during transport</li> </ul>                      | 0 ... 40 °C<br>0 ... 60 °C<br>-40 ... +70 °C<br>-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 S7-300 single width                             |
| width   | 40 mm  |

|  |           |
|--|-----------|
| height   | 125 mm    |
| depth  | 120 mm    |
| net weight   | 0.22 kg   |
| fastening method   | Yes       |
| • S7-300 rail mounting   |           |
| <b>performance data / open communication</b>   |           |
| number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum            | 16        |
| data volume  |           |
| • as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum         | 8 Kibyte  |
| • as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum  | 8 Kibyte  |
| • as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum         | 8 Kibyte  |
| • as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum      | 2 Kibyte  |
| number of Multicast stations   | 16        |
| <b>performance data / S7 communication</b>   |           |
| number of possible connections / for S7 communication  |           |
| • maximum  | 16        |
| <b>performance data / multi-protocol mode</b>  |           |
| number of active connections / with multi-protocol mode  | 32        |
| <b>performance data / PROFINET communication / as PN IO controller</b>   |           |
| 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  |           |
| • as user data for input variables / as PROFINET IO controller / maximum                                       | 1 Kibyte  |
| • as user data for output variables / as PROFINET IO controller / maximum                                      | 1 Kibyte  |
| • as user data for input variables per PN IO device / as PROFINET IO controller / maximum                      | 1433 byte |
| • as user data for output variables per PN IO device / as PROFINET IO controller / maximum                     | 1433 byte |
| • as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum  | 240 byte  |
| • as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum | 240 byte  |
| <b>performance data / PROFINET communication / as PN IO device</b>   |           |
| product function / PROFINET IO device  | Yes       |
| data volume  |           |
| • as user data for input variables / as PROFINET IO device / maximum   | 512 byte  |
| • as user data for output variables / as PROFINET IO device / maximum  | 512 byte  |
| • as user data for input variables / for each sub-module as PROFINET IO device                                 | 240 byte  |
| • as user data for output variables / for each sub-module as PROFINET IO device                                | 240 byte  |
| • as user data for the consistency area for each sub-module  | 240 byte  |
| number of submodules / per PROFINET IO-Device  | 32        |
| <b>performance data / telecontrol</b>  |           |
| protocol / is supported  |           |
| • TCP/IP   | Yes       |
| <b>product functions / management, configuration, engineering</b>  |           |
| product function / MIB support   | Yes       |
| protocol / is supported  |           |
| • SNMP v1  | Yes       |
| • DCP  | Yes       |
| • LLDP   | Yes       |

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|--|--|
| configuration software   |  |
| <ul style="list-style-type: none"> <li>required</li> </ul>   | STEP 7 V5.4 SP2 or higher / STEP 7 Professional V11 (TIA Portal) or higher   |
| identification & maintenance function  |  |
| <ul style="list-style-type: none"> <li>I&amp;M0 - device-specific information</li> </ul>                   | Yes  |
| <ul style="list-style-type: none"> <li>I&amp;M1 - higher level designation/location designation</li> </ul> | Yes  |
| <b>product functions / diagnostics</b>   |  |
| product function / web-based diagnostics   | Yes  |
| <b>product functions / switch</b>  |  |
| product feature / switch   | Yes  |
| product function   |  |
| <ul style="list-style-type: none"> <li>switch-managed</li> </ul>   | No   |
| <ul style="list-style-type: none"> <li>with IRT / PROFINET IO switch</li> </ul>                            | Yes  |
| <ul style="list-style-type: none"> <li>configuration with STEP 7</li> </ul>                                | Yes  |
| <b>product functions / redundancy</b>  |  |
| product function   |  |
| <ul style="list-style-type: none"> <li>ring redundancy</li> </ul>  | Yes  |
| <ul style="list-style-type: none"> <li>redundancy manager</li> </ul>                                       | No   |
| protocol / is supported / Media Redundancy Protocol (MRP)  | Yes  |
| <b>product functions / security</b>  |  |
| product function   |  |
| <ul style="list-style-type: none"> <li>password protection for Web applications</li> </ul>                 | No   |
| <ul style="list-style-type: none"> <li>ACL - IP-based</li> </ul>   | Yes  |
| <ul style="list-style-type: none"> <li>ACL - IP-based for PLC/routing</li> </ul>                           | No   |
| <ul style="list-style-type: none"> <li>switch-off of non-required services</li> </ul>                      | Yes  |
| <ul style="list-style-type: none"> <li>blocking of communication via physical ports</li> </ul>             | Yes  |
| <ul style="list-style-type: none"> <li>log file for unauthorized access</li> </ul>                         | No   |
| <b>product functions / time</b>  |  |
| product function / SICLOCK support   | Yes  |
| product function / pass on time synchronization  | Yes  |
| protocol / is supported  |  |
| <ul style="list-style-type: none"> <li>NTP</li> </ul>  | Yes  |
| <b>standards, specifications, approvals</b>  |  |
| reference code   |  |
| <ul style="list-style-type: none"> <li>according to IEC 81346-2:2019</li> </ul>                            | KEC  |
| <b>further information / internet links</b>  |  |
| internet link  |  |
| <ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> </ul>            | <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>  |
| <ul style="list-style-type: none"> <li>to website: Industrial communication</li> </ul>                     | <a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>  |
| <ul style="list-style-type: none"> <li>to web page: SiePortal</li> </ul>                                   | <a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>  |
| <ul style="list-style-type: none"> <li>to website: Image database</li> </ul>                               | <a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>  |
| <ul style="list-style-type: none"> <li>to website: CAx-Download-Manager</li> </ul>                         | <a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>  |
| <ul style="list-style-type: none"> <li>to website: Industry Online Support</li> </ul>                      | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>  |
| <b>security information</b>  |  |
| security information   | <p>Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a>. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <a href="https://www.siemens.com/cert.">https://www.siemens.com/cert.</a> (V4.7)</p> |
| <b>Approvals / Certificates</b>  |  |
| <b>General Product Approval</b>  |  |



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last modified:

8/22/2024