

### product type designation



### CP 443-1

\*\*\*\*\* spare part \*\*\*\*\* communications processor CP 443-1 for connection of SIMATIC S7-400 to industrial Ethernet over ISO, TCP/IP and UDP, S7 communication, fetch/write, SEND/RECEIVE with and without RFC1006 multicast, PROFINET IO controller, DHCP, SNMP V2, web, diagnostics, initialization via LAN, access protection via IP access list integrated real-time switch ERTEC 400, 2xRJ45 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> </ul>            | 2   |
| type of electrical connection  |   |
| <ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>            | RJ45 port                                       |
| design of the removable storage  |   |
| <ul style="list-style-type: none"> <li>C-PLUG</li> </ul>   | No  |
| supply voltage, current consumption, power loss  |   |
| type of voltage / of the supply voltage  | DC  |
| supply voltage / 1 / from backplane bus  | 5 V   |
| relative symmetrical tolerance / at DC   |   |
| <ul style="list-style-type: none"> <li>at 5 V</li> </ul>   | 5 %   |
| consumed current   |   |
| <ul style="list-style-type: none"> <li>from backplane bus / at DC / at 5 V / typical</li> </ul>                      | 1.4 A   |
| power loss [W]   | 7.25 W  |
| ambient conditions   |   |
| ambient temperature  |   |
| <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> </ul> | 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 S7-400 single width              |
| width  | 25 mm   |
| height   | 290 mm  |
| depth  | 210 mm  |
| net weight   | 0.7 kg  |
| product features, product functions, product components / general  |   |
| number of units  |   |
| <ul style="list-style-type: none"> <li>per CPU / maximum</li> <li>note</li> </ul>                                    | 14<br>max. 4 as PN IO ctrl.                     |
| performance data / open communication  |   |

|  |                              |
|--|------------------------------|
| number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum  | 64                           |
| data volume  |                              |
| <ul style="list-style-type: none"> <li>as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>         | 8 Kibyte                     |
| <ul style="list-style-type: none"> <li>as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>  | 8 Kibyte                     |
| <ul style="list-style-type: none"> <li>as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>         | 8 Kibyte                     |
| <ul style="list-style-type: none"> <li>as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>      | 2 Kibyte                     |
| number of possible connections / for open communication  |                              |
| <ul style="list-style-type: none"> <li>by means of T blocks / maximum</li> </ul>   | 64                           |
| data volume  |                              |
| <ul style="list-style-type: none"> <li>as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum</li> </ul>             | 1452 byte                    |
| <b>performance data / S7 communication</b>   |                              |
| number of possible connections / for S7 communication  |                              |
| <ul style="list-style-type: none"> <li>maximum</li> </ul>  | 128; when using several CPUs |
| <ul style="list-style-type: none"> <li>with PG connections / maximum</li> </ul>  | 2                            |
| <b>performance data / multi-protocol mode</b>  |                              |
| number of active connections / with multi-protocol mode  | 128                          |
| <b>performance data / PROFINET communication / as PN IO controller</b>   |                              |
| product function / PROFINET IO controller  | Yes                          |
| number of PN IO devices / on PROFINET IO controller / operable / total   | 128                          |
| number of PN IO IRT devices / on PROFINET IO controller / operable   | 128                          |
| number of external PN IO lines / with PROFINET / per rack  | 4                            |
| data volume  |                              |
| <ul style="list-style-type: none"> <li>as user data for input variables / as PROFINET IO controller / maximum</li> </ul>                                       | 4 Kibyte                     |
| <ul style="list-style-type: none"> <li>as user data for output variables / as PROFINET IO controller / maximum</li> </ul>                                      | 4 Kibyte                     |
| <ul style="list-style-type: none"> <li>as user data for input variables per PN IO device / as PROFINET IO controller / maximum</li> </ul>                      | 1433 byte                    |
| <ul style="list-style-type: none"> <li>as user data for output variables per PN IO device / as PROFINET IO controller / maximum</li> </ul>                     | 1433 byte                    |
| <ul style="list-style-type: none"> <li>as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum</li> </ul>  | 240 byte                     |
| <ul style="list-style-type: none"> <li>as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum</li> </ul> | 240 byte                     |
| <b>product functions / management, configuration, engineering</b>  |                              |
| product function / MIB support   | Yes                          |
| protocol / is supported  |                              |
| <ul style="list-style-type: none"> <li>SNMP v1</li> </ul>  | Yes                          |
| <ul style="list-style-type: none"> <li>DCP</li> </ul>  | Yes                          |
| <ul style="list-style-type: none"> <li>LLDP</li> </ul>   | Yes                          |
| configuration software   |                              |
| <ul style="list-style-type: none"> <li>required</li> </ul>   | STEP 7 V5.4 SP4 or higher    |
| <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>   | Yes                          |

|   |   |
|---|---|
| protocol / is supported / Media Redundancy Protocol (MRP) | Yes   |
| <b>product functions / security</b>                       |   |
| 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  |
| <b>product functions / time</b>                           |   |
| product function / SICLOCK support                        | Yes   |
| product function / pass on time synchronization           | Yes   |
| protocol / is supported                                   |   |
| • NTP   | Yes   |
| <b>further information / internet links</b>               |   |
| internet link   |   |
| • to web page: selection aid TIA Selection Tool           | <a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>   |
| • to website: Industrial communication                    | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>   |
| • to website: Industry Mall                               | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>   |
| • to website: Information and Download Center             | <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>   |
| • to website: Image database                              | <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>   |
| • to website: CAX-Download-Manager                        | <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>   |
| • to website: Industry Online Support                     | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>   |
| <b>security information</b>                               |   |
| 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 <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a> . To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <a href="http://support.automation.siemens.com">http://support.automation.siemens.com</a> . (V3.4) |

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