

**Product-type designation**

**CP 443-1**



COMMUNICATIONSPROCESSOR CP443-1 FOR CONNECTING SIMATIC S7-400 TO INDUST. ETHERN. VIA ISO, TCP/IP AND UDP, S7-COMM., FETCH/WRITE, SEND/RCV WITH AND W/O RFC1006, MULTICAST, PROFINET IO- CONTROLLER, DHCP, SNMP V2, WEB-, DIAGNOS., INITIALISATION VIA LAN, ACCESS PROTECTION VIA IP-ACCESS LIST, INTEGRATED REAL-TIME SWITCH ERTEC 400, 2XRJ45 CONNECT. FOR LAN WITH 10/100 MBIT/S

**Transmission rate**

Transfer rate / at the interface 1 10 ... 100 Mbit/s

**Interfaces**

Number of electrical connections / at interface 1 / in accordance with Industrial Ethernet 2  
 Design of electrical connection / at interface 1 / in accordance with Industrial Ethernet RJ45 port

**Supply voltage, current consumption, power loss**

Type of voltage / of supply voltage DC  
 Supply voltage / 1 / from backplane bus 5 V  
 Relative symmetrical tolerance / at 5 V / with DC 5 %  
 Consumed current / from backplane bus / at 5 V / for DC / Typical 1.4 A  
 Resistive loss 8.6 W

**Permitted ambient conditions**

Ambient temperature  
 • during operating 0 ... 60 °C  
 • during storage -40 ... +70 °C  
 • during transport -40 ... +70 °C  
 Relative humidity / at 25 °C / without condensation / during operating / maximum 95 %  
 Protection class IP IP20

| Design, dimensions and weight   |                         |
|---|-------------------------|
| Width   | 25 mm                   |
| Height  | 290 mm                  |
| Depth   | 210 mm                  |
| Net weight  | 0.7 kg                  |
| Product properties, functions, components / general   |                         |
| Number of modules   |                         |
| <ul style="list-style-type: none"> <li>• per CPU / maximum</li> </ul>   | 14                      |
| <ul style="list-style-type: none"> <li>• note</li> </ul>  | max. 4 as PN IO ctrl.   |
| <b>Performance data / open communication</b>  |                         |
| 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 / by means of T blocks / maximum  | 64                      |
| Data volume / as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum  | 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                     |
| <ul style="list-style-type: none"> <li>• with PG connections / maximum</li> </ul>   | 2                       |
| <ul style="list-style-type: none"> <li>• note</li> </ul>  | when using several CPUs |
| <b>Performance data / multi-protocol mode</b>   |                         |
| Number of active connections / with multiprotocol 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 / usable / total  | 128                     |
| Number of PN IO IRT-Devices / on PROFINET IO-Controller / usable  | 128                     |
| Number of external PN IO lines / with PROFINET / per rack   | 4                       |
| Data volume   |                         |
| <ul style="list-style-type: none"> <li>• as useful data for input variables / as PROFINET IO controller / maximum</li> </ul>                                    | 4 Kibyte                |

|  |              |
|--|--------------|
| <ul style="list-style-type: none"> <li>• as useful data for output variables / with PROFINET IO controller / maximum</li> </ul>                            | 4 Kibyte     |
| <ul style="list-style-type: none"> <li>• as useful data for input variables per PN IO device / with PROFINET IO controller / maximum</li> </ul>            | 1433 byte    |
| <ul style="list-style-type: none"> <li>• as useful data for output variables per PN IO device / with PROFINET IO controller / maximum</li> </ul>           | 1433 byte    |
| <ul style="list-style-type: none"> <li>• as user data for input variable per PN IO device / per submodule 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 / per submodule as PROFINET IO controller / maximum</li> </ul> | 240 byte     |
| <b>Product functions / management, configuration</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          |
| <b>Product functions / Diagnosis</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>• for 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          |
| <ul style="list-style-type: none"> <li>• MRP redundancy protocol</li> </ul>  | Yes          |
| <b>Product functions / Security</b>  |              |
| Product function   |              |
| <ul style="list-style-type: none"> <li>• ACL - IP-based</li> </ul>   | Yes          |
| <ul style="list-style-type: none"> <li>• switchoff 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   |              |
| <ul style="list-style-type: none"> <li>• SICLOCK support</li> </ul>  | Yes          |
| <ul style="list-style-type: none"> <li>• pass on time synchronization</li> </ul>   | Yes          |
| Protocol / will be supported / NTP   | Yes          |
| <b>letzte Änderung:</b>  | Feb 13, 2013 |