

### Product type designation

### CP 443-1

Communications processor CP 443-1; 2x 10/100 Mbit/s (IE switch); RJ45 ports; ISO; TCP; UDP; PROFINET IO controller; S7 communication; Open communication (SEND/ RECEIVE); S7 routing; IP configuration via DHCP/ Block; IP Access Control List; Time synchronization; extended web diagnostics; Fast Startup; Support for PROFINergy;



### Transmission rate

#### Transfer rate

- at the 1st interface

10 ... 100 Mbit/s

### Interfaces

Number of interfaces / acc. to Industrial Ethernet

2

Number of electrical connections

- at the 1st interface / acc. to Industrial Ethernet

2

Type of electrical connection

- at the 1st interface / acc. to Industrial Ethernet

RJ45 port

design of the removable storage / C-PLUG

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

- at 5 V

5 %

Consumed current

- from backplane bus / at DC / at 5 V / typical

1.4 A

Power loss [W]	7.25 W
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### Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	0 ... 60 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-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 S7-400 single width
Width	25 mm
Height	290 mm
Depth	210 mm
Net weight	0.7 kg

### Product properties, functions, components / general

Number of units	
<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.

### Performance data / open communication

Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	64
Amount of data	
<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
Amount of data	
<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

Performance data / S7 communication	
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
Performance data / multi-protocol mode	
Number of active connections / with multi-protocol mode	128
Performance data / PROFINET communication / as PN IO-Controller	
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	64
Number of external PN IO lines / with PROFINET / per rack	4
Amount of data	
<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 input 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
Product functions / management, configuration	
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 V5.5 SP3 or higher / STEP 7 Professional V12 (TIA Portal) or higher
Product functions / Diagnosis	
Product function / Web-based diagnostics	Yes

Product functions / switch	
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
Product functions / Redundancy	
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
Product functions / Security	
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
Product functions / Time	
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
Further Information / Internet Links	
Internet-Link	
<ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL</li> </ul>	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
<ul style="list-style-type: none"> <li>• to website: Industrial communication</li> </ul>	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>• to website: Industry Mall</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
<ul style="list-style-type: none"> <li>• to website: Information and Download Center</li> </ul>	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
<ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>• to website: CAx Download Manager</li> </ul>	<a href="http://www.siemens.com/cax">http://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>
Security information	

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Security information

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**last modified:**

01/14/2019