

### 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	
• during operation	0 ... 60 °C
• during storage	-40 ... +70 °C
• during transport	-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	
• per CPU / maximum	14
• Note	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	
• 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 possible connections / for open communication	
• by means of T blocks / maximum	64
Amount of data	
• as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum	1452 byte

## Performance data / S7 communication

Number of possible connections / for S7 communication

- maximum 128
- with PG connections / maximum 2
- Note 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

- as user data for input variables / as PROFINET IO controller / maximum 4 Kibyte
- as user data for input variables / as PROFINET IO controller / maximum 4 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

Product function / MIB support

Yes

Protocol / is supported

- SNMP v1 Yes
- DCP Yes
- LLDP Yes

Configuration software

- required 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	
• switch-managed	No
• with IRT / PROFINET IO switch	Yes
• Configuration with STEP 7	Yes

#### Product functions / Redundancy

Product function	
• Ring redundancy	Yes
• Redundancy manager	Yes
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

#### Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</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>

#### Security information

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