

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 PROFINET energy;



Transfer 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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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 features, product functions, product 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
- with PG connections / maximum

128; when using several CPUs

2

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
- as user data for input variables / as PROFINET IO controller / maximum
- as user data for input variables per PN IO device / as PROFINET IO controller / maximum
- as user data for output variables per PN IO device / as PROFINET IO controller / maximum
- as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum
- as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum

4 Kibyte

4 Kibyte

1433 byte

1433 byte

240 byte

240 byte

Product functions / management, configuration, engineering

Product function / MIB support

Yes

Protocol / is supported

- SNMP v1
- DCP
- LLDP

Yes

Yes

Yes

Configuration software

- required

STEP 7 V5.5 SP3 or higher / STEP 7 Professional V12 (TIA Portal) or higher

Product functions / Diagnostics

Product function / Web-based diagnostics	Yes
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Product functions / Switch

Product feature / Switch	Yes
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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	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

Security information

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