

Product type designation

CP 443-1

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 Anschluss for LAN with 10/100 Mbit/s



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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Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> during operation 	0 ... 60 °C
<ul style="list-style-type: none"> during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> during transport 	-40 ... +70 °C
Relative humidity	
<ul style="list-style-type: none"> 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"> per CPU / maximum 	14
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum 	8 Kibyte
<ul style="list-style-type: none"> as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum 	8 Kibyte
<ul style="list-style-type: none"> as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum 	8 Kibyte
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> 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
- Note

128

2

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

128

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

Product function / MIB support

Yes

Protocol / is supported

- SNMP v1
- DCP
- LLDP

Yes

Yes

Yes

Configuration software

- required

STEP 7 V5.4 SP4 or higher

Product functions / Diagnosis

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

Product feature / Switch	Yes
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Product function	
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|---------------------------------|-----|
| • switch-managed | No |
| • with IRT / PROFINET IO switch | Yes |
| • Configuration with STEP 7 | Yes |

Product functions / Redundancy

Product function	
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| • Ring redundancy | Yes |
| • Redundancy manager | Yes |

Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
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Product functions / Security

Product function	
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|------------------------------------------------|-----|
| • 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
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Product function / pass on time synchronization	Yes
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Protocol / is supported	
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- | | |
|-------|-----|
| • NTP | Yes |
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Further Information / Internet Links

Internet-Link	
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- | | |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| • 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

Security information

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