

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;



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
----------------	--------

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 weights

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	
<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

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
--	-----

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 | 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

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>. (V3.4)

last modified:

05/12/2020