

product type designation



CP 443-1 Advanced

Communications processor CP 443-1 Advanced 1x 10/100/1000 Mbps, 4x 10/100 Mbps (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-of-day synchronization; extended web diagnostics; Fast Startup; PROFinenergy support; IP routing; FTP; Web server; email; please note SIOS ID: 109799025

transfer rate	
transfer rate	
<ul style="list-style-type: none"> at the 1st interface 	10 ... 1000 Mbit/s
<ul style="list-style-type: none"> at the 2nd interface 	10 ... 100 Mbit/s
interfaces	
number of interfaces / according to Industrial Ethernet	5
number of electrical connections	
<ul style="list-style-type: none"> at the 1st interface / according to Industrial Ethernet 	1
<ul style="list-style-type: none"> at the 2nd interface / according to Industrial Ethernet 	4
type of electrical connection	
<ul style="list-style-type: none"> at the 1st interface / according to Industrial Ethernet 	RJ45 port
<ul style="list-style-type: none"> at the 2nd interface / according to Industrial Ethernet 	RJ45 port
design of the removable storage	
<ul style="list-style-type: none"> C-PLUG 	Yes
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	
<ul style="list-style-type: none"> at 5 V 	5 %
consumed current	
<ul style="list-style-type: none"> from backplane bus / at DC / at 5 V / typical 	1.8 A
power loss [W]	9 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 note 	<p>14</p> <p>max. 4 as PN IO ctrl.</p>
performance data / open communication	
number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	64
data volume	
<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
data volume	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> maximum with PG connections / maximum 	<p>128; when using several CPUs</p> <p>2</p>
performance data / multi-protocol mode	
number of active connections / with multi-protocol mode	128
performance data / IT functions	
number of possible connections	
<ul style="list-style-type: none"> as client / by means of FTP / maximum as server / by means of FTP / maximum 	<p>20</p> <p>10</p>
number of possible connections	
<ul style="list-style-type: none"> as server / by means of HTTP / maximum as email client / maximum 	<p>4</p> <p>1</p>
data volume / as user data for email / maximum	8 Kibyte
storage capacity / of the user memory	
<ul style="list-style-type: none"> as flash memory file system as RAM additionally buffered as RAM via central backup battery 	<p>30 Mibyte</p> <p>16 Mibyte</p> <p>512 Kibyte</p>
number of possible write cycles / of the flash memory cells	100000
performance data / PROFINET communication / as PN IO controller	
product function / PROFINET IO controller	Yes
number of PN IO devices / on PROFINET IO controller / operable / total	128
number of PN IO IRT devices / on PROFINET IO controller / operable	64
number of external PN IO lines / with PROFINET / per rack	4
data volume	
<ul style="list-style-type: none"> as user data for input variables / as PROFINET IO controller / maximum as user data for output 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 	<p>4 Kibyte</p> <p>4 Kibyte</p> <p>1433 byte</p> <p>1433 byte</p> <p>240 byte</p> <p>240 byte</p>
product functions / management, configuration, engineering	
product function / MIB support	Yes
protocol / is supported	
<ul style="list-style-type: none"> SNMP v1 	Yes

<ul style="list-style-type: none"> • SNMP v3 	Yes
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	Yes
configuration software	
<ul style="list-style-type: none"> • required 	STEP 7 V5.5 SP3 or higher / STEP 7 Professional V12 (TIA Portal) or higher
product function / is supported / identification link	Yes
product functions / diagnostics	
product function / web-based diagnostics	Yes
product functions / switch	
product feature / switch	Yes
product function	
<ul style="list-style-type: none"> • switch-managed 	No
<ul style="list-style-type: none"> • with IRT / PROFINET IO switch 	Yes
<ul style="list-style-type: none"> • configuration with STEP 7 	Yes
product functions / redundancy	
product function	
<ul style="list-style-type: none"> • ring redundancy 	Yes
<ul style="list-style-type: none"> • redundancy manager 	Yes
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product functions / security	
firewall version	stateful inspection
product function / with VPN connection	IPSec
type of encryption algorithms / with VPN connection	AES-256, AES-192, AES-128, 3DES-168, DES-56
type of authentication procedure / with VPN connection	Preshared key (PSK), X.509v3 certificates
type of hashing algorithms / with VPN connection	MD5, SHA-1
number of possible connections / with VPN connection	32
product function	
<ul style="list-style-type: none"> • password protection for Web applications 	Yes
<ul style="list-style-type: none"> • ACL - IP-based 	Yes
<ul style="list-style-type: none"> • ACL - IP-based for PLC/routing 	Yes
<ul style="list-style-type: none"> • switch-off of non-required services 	Yes
<ul style="list-style-type: none"> • blocking of communication via physical ports 	Yes
<ul style="list-style-type: none"> • log file for unauthorized access 	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"> • NTP 	Yes
standards, specifications, approvals / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes; GB3836.1, GB3836.8
certificate of suitability / CCC / for hazardous zone according to GB standard / as marking	Ex nA IIC T4 Gc
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
<ul style="list-style-type: none"> • total 	350.22 kg
<ul style="list-style-type: none"> • during manufacturing 	65.61 kg
<ul style="list-style-type: none"> • during operation 	281.89 kg
<ul style="list-style-type: none"> • after end of life 	2.72 kg
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to website: Image database 	https://www.automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected

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Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[Miscellaneous](#)

General Product Approval

EMV

For use in hazardous locations



[KC](#)



IECEX

[FM](#)

[CCC-Ex](#)

For use in hazardous locations

Marine / Shipping



UL



ABS



BUREAU VERITAS



DNV



LRS

[NK / Nippon Kaiji Kyokai](#)

Marine / Shipping

Environment

[CCS \(China Classification Society\)](#)

[Confirmation](#)



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