

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; PROFINET support; IP routing; FTP; Web server; email; please note SIOS ID: 109799025

transfer rate

transfer rate	
• at the 1st interface	10 ... 1000 Mbit/s
• at the 2nd interface	10 ... 100 Mbit/s

interfaces

number of interfaces / according to Industrial Ethernet	5
number of electrical connections	
• at the 1st interface / according to Industrial Ethernet	1
• at the 2nd interface / according to Industrial Ethernet	4
type of electrical connection	
• at the 1st interface / according to Industrial Ethernet	RJ45 port
• at the 2nd interface / according to Industrial Ethernet	RJ45 port
design of the removable storage	
• 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	
• at 5 V	5 %
consumed current	
• from backplane bus / at DC / at 5 V / typical	1.8 A
power loss [W]	9 W

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 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	
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• per CPU / maximum • note	14 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
data volume	
• 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
data volume	
• 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 / IT functions	
number of possible connections	
• as client / by means of FTP / maximum • as server / by means of FTP / maximum	20 10
number of possible connections	
• as server / by means of HTTP / maximum • as email client / maximum	4 1
data volume / as user data for email / maximum	8 Kibyte
storage capacity / of the user memory	
• as flash memory file system • as RAM • additionally buffered as RAM via central backup battery	30 Mibyte 16 Mibyte 512 Kibyte
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	
• 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	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	Yes

• SNMP v3 • DCP • LLDP	Yes
configuration software	
• required	STEP 7 V5.5 SP3 or higher / STEP 7 Professional V12 (TIA Portal) or higher
product function / is supported / identification link	Yes; according to IEC 61406-1:2022
product functions / diagnostics	
product function / web-based diagnostics	Yes
product functions / switch	
product feature / switch	Yes
product function	
• switch-managed • with IRT / PROFINET IO switch • configuration with STEP 7	No Yes Yes
product functions / redundancy	
product function	
• ring redundancy • redundancy manager	Yes 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	
• password protection for Web applications • ACL - IP-based • ACL - IP-based for PLC/routing • switch-off of non-required services • blocking of communication via physical ports • log file for unauthorized access	Yes Yes Yes Yes Yes No
product functions / time	
product function / SICLOCK support	Yes
product function / pass on time synchronization	Yes
protocol / is supported	
• NTP	Yes
standards, specifications, approvals	
reference code	
• according to IEC 81346-2:2019	KEC
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
• total • during manufacturing • during operation • after end of life	350.22 kg 65.61 kg 281.89 kg 2.72 kg
further information / internet links	
internet link	
• to web page: selection aid TIA Selection Tool • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAX-Download-Manager • to website: Industry Online Support	https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax 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,

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Approvals / Certificates

General Product Approval



[Declaration of Conformity](#)



General Product Approval

EMV

For use in hazardous locations

[Miscellaneous](#)



[KC](#)



[FM](#)

For use in hazardous locations

Marine / Shipping

[CCC-Ex](#)



[NK / Nippon Kaiji Kyokai](#)

Marine / Shipping

Environment

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[Confirmation](#)



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