SIEMENS

Data sheet 6GK7443-1EX31-0XE0

product type designation	**CP 443-1**



Communications processor CP 443-1; 2x 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 synchronization; extended web diagnostics; fast startup; support for PROFIenergy;

product brand name	SIMATIC NET
Technical Product Detail Page	https://i.siemens.com/1P6GK7443-1EX31-0XE0
transfer rate	
transfer rate	
● at the 1st interface	100 Mbit/s
interfaces	
number of interfaces / according to Industrial Ethernet	2
number of electrical connections	
● at the 1st interface / according to Industrial Ethernet	2
type of electrical connection	
● at the 1st interface / according 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	0.39 A
power loss [W]	2 W; typical 2 W, maximum 2.9 W
ambient conditions	
ambient temperature	
● during operation	0 ... 70 °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 feature / conformal coating	Yes
product features, product functions, product components / general	

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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
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	128; when using several CPUs
● with PG connections / maximum	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 / 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	4 Kibyte
● as user data for output variables / as PROFINET IO controller / maximum	4 Kibyte
● as user data for input variables per PN IO device / as PROFINET IO controller / maximum	1433 byte
● as user data for output variables per PN IO device / as PROFINET IO controller / maximum	1433 byte
● as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum	240 byte
● as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum	240 byte
product functions / management, configuration, engineering	
product function / MIB support	Yes
protocol / is supported	
● SNMP v1	Yes
● DCP	Yes
● LLDP	Yes
configuration software	
● required	STEP 7 V5.7 SP2 or higher / STEP 7 Professional V20 (TIA Portal) or higher
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
product functions / diagnostics	
product function / web-based diagnostics	Yes
product functions / switch	
product feature / switch	Yes
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	
● 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
● SIMATIC time synchronization (SIMATIC Time)	Yes
standards, specifications, approvals	
certificate of suitability / CE marking	Yes
certificate of suitability / UKCA marking	Yes
certificate of suitability / cULus approval	Yes
certificate of suitability / Regulatory Compliance Mark (RCM)	Yes
certificate of suitability / RoHS conformity	Yes
standards, specifications, approvals / hazardous environments / header	
certificate of suitability / ATEX	Yes
certificate of suitability / IECEx	Yes
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
● total	127.08 kg
● during manufacturing	52.6 kg
● during operation	73.5 kg
● after end of life	0.98 kg
further information / internet links	
internet link	
● to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to website: Industrial communication	https://www.siemens.com/simatic-net
● to web page: SiePortal	https://sieportal.siemens.com/
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: CAx-Download-Manager	https://siemens.com/cax
● 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 to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available

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Approvals / Certificates

General Product Approval

China RoHS

China RoHS

General Product Approval

EMV

For use in hazardous locations

For use in hazardous locations

Environment

FM

CCC-Ex

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