SIEMENS

Data sheet	6GK7243-8RX30-0XE0

product type designation	CP 1243-8 IRC

Communications processor CP 1243-8 IRC for operating a SIMATIC S7-1200 in the TeleControl system Professional; for SINAUT ST7; DNP3; IEC 60870-5, station type: RTU; WAN connections;1) Ethernet 2) Additionally expandable with TS module RS-232 or TS module modem or TS module GSM or TS module ISDN; Operation with TIM modules possible.

transfer rate	
transfer rate	
● at the 1st interface	10 ... 100 Mbit/s
● at the 2nd interface	0.3 ... 115.2 kbit/s
interfaces	
number of interfaces / according to Industrial Ethernet	1
number of electrical connections	
● at the 1st interface / according to Industrial Ethernet	1
● for power supply	1
type of electrical connection	
● at the 1st interface / according to Industrial Ethernet	RJ45 port
type of electrical connection	
● at interface 2 / for external data transmission	Interface to the TS Module
● for power supply	3-pole terminal block
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	DC
supply voltage / 1 / from backplane bus	5 V
supply voltage / external	24 V
supply voltage / external	19.2 ... 28.8 V
supply voltage / external / at DC / rated value	24 V
supply voltage / external / at DC / rated value	19.2 ... 28.8 V
consumed current	
● from backplane bus / at DC / at 5 V / typical	0.25 A
● from external supply voltage / at DC / at 24 V / typical	0.1 A
power loss [W]	2.4 W; 1.25 W from S7-1200 backplane without TS module. 2.4 W from 24 V DC external with TS module
ambient conditions	
ambient temperature	
● for vertical installation / during operation	-20 ... +60 °C
● for horizontally arranged busbars / during operation	-20 ... +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 S7-1200 single width
width	30 mm
height	110 mm

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depth	75 mm
net weight	0.122 kg
fastening method	
● 35 mm top hat DIN rail mounting	Yes
● S7-300 rail mounting	No
● wall mounting	Yes

product features, product functions, product components / general

number of units	
● per CPU / maximum	1
● note	One CP pluggable on left side of CPU, one TS Module pluggable left side of CP.

product functions / cloud connectivity

protocol / is supported	
● Message Queuing Telemetry Transport (MQTT)	Yes
● Advanced Message Queuing Protocol (AMQP)	No
product function / for cloud connectivity	
● trigger management	Yes
● time stamping	Yes
product feature / for cloud connectivity / buffered message frame memory	No
number of active connections / for cloud connectivity	1
number of data points per device / maximum	500

performance data / open communication

number of possible connections / for open communication	
● by means of T blocks / maximum	like CPU

performance data / S7 communication

number of possible connections / for S7 communication	
● maximum	Configured S7-Connection for ST7-Communication
● with PG connections / maximum	2
● with OP connections / maximum	1
service	
● SINAUT ST7 via S7 communication	Yes

performance data / IT functions

number of possible connections	
● as email client / maximum	1

performance data / telecontrol

suitability for use	
● node station	No
● substation	Yes
● TIM control center	No
● note	Ethernet and TS Module can be operated in parallel
control center connection	control center with ST7 function
● by means of a permanent connection	supported
protocol / is supported	
● DNP3	Yes
● IEC 60870-5	Yes
● SINAUT ST7 protocol	Yes
product function / data buffering if connection is aborted	Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams
number of data points per station / maximum	500
transmission format	
● for SINAUT ST7 protocol with multi-master polling / 10-bit	Yes
● for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit	Yes
operating mode for scanning of data transmission	
● with dedicated line/radio link / with SINAUT ST7 protocol	Polling
● with dial-up network / with SINAUT ST7 protocol	spontaneous
hamming distance	
● for SINAUT ST7 protocol	4

performance data / teleservice

diagnostics function / online diagnostics with SIMATIC STEP 7	Yes
product function	

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● program download with SIMATIC STEP 7	Yes
● remote firmware update	Yes

product functions / management, configuration, engineering

protocol / is supported	
● SNMP v3	Yes
● DCP	Yes
configuration software	
● required	SINAUT ES V5.5 and STEP7 V13 SP1 or higher
● for PG configuring / required / SINAUT ST7 configuration software for PG	Yes

product functions / diagnostics

product function / web-based diagnostics	Yes

product functions / security

firewall version	stateful inspection
operating mode / Virtual Private Network (VPN)	Yes
product function / with VPN connection	IPsec, SINEMA RC
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	8
product function	
● password protection for teleservice access	No
● encrypted data transmission	Yes
● MSC client via GPRS modem with MSC capability	Yes
protocol	
● is supported / MSC protocol	Yes
● with Virtual Private Network MSC / is supported	TCP/IP
key length / for MSC / with Virtual Private Network	128 bit
number of possible connections	
● as MSC client / with VPN connection	1
● as MSC server / with VPN connection	0

product functions / time

protocol / is supported	
● NTP	Yes
time synchronization	
● from NTP-server	Yes
● from control center	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	89.58 kg
● during manufacturing	14.29 kg
● during operation	75.11 kg
● after end of life	0.18 kg

further information / internet links

internet link	
● 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://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 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

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Approvals / Certificates

General Product Approval

CE EG-Konf.	Declaration of Conformity	UK CA	CCC	EAC	UL

General Product Approval	For use in hazardous locations				Environment
RCM	ATEX	IECEx	CCC-Ex	Confirmation	EPD

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