# **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; IEC60870-5, Station type: RTU; WAN connections: 1) Ethernet 2) Additionally expandable with TS module RS232 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
<ul> <li>at the 2nd interface</li> </ul>	0.3 115.2 kbit/s
interfaces	
number of interfaces / acc. to Industrial Ethernet	1
number of electrical connections	
<ul> <li>at the 1st interface / acc. to Industrial Ethernet</li> </ul>	1
<ul><li>for power supply</li></ul>	1
type of electrical connection	
<ul> <li>at the 1st interface / acc. to Industrial Ethernet</li> </ul>	RJ45 port
type of electrical connection	
<ul> <li>at interface 2 / for external data transmission</li> </ul>	Interface to the TS Module
<ul><li>for power supply</li></ul>	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	
<ul><li>from backplane bus / at DC / at 5 V / typical</li></ul>	0.25 A
<ul> <li>from external supply voltage / at DC / at 24 V / typical</li> </ul>	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	
<ul> <li>for vertical installation / during operation</li> </ul>	-20 +60 °C
<ul> <li>for horizontally arranged busbars / during operation</li> </ul>	-20 +70 °C
during storage	-4070 °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
depth	75 mm
net weight	0.122 kg
fastening method	51,22,13
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	. 30
• per CPU / maximum	1
• note	One CP pluggable on left side of CPU, one TS Module pluggable left
10.0	side of CP.
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	
<ul> <li>SINAUT ST7 via S7 communication</li> </ul>	Yes
performance data / IT functions	
number of possible connections	
as email client / maximum	1
performance data / telecontrol	
SUITABILITY FOR USE	
suitability for use  • node station	No
•	No Yes
node station	
<ul><li>node station</li><li>substation</li></ul>	Yes
<ul><li>node station</li><li>substation</li><li>TIM control center</li></ul>	Yes No
<ul><li>node station</li><li>substation</li><li>TIM control center</li><li>note</li></ul>	Yes No Ethernet and TS Module can be operated in parallel
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> </ul> control center connection	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported Yes
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> <li>SINAUT ST7 protocol</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes Yes
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> <li>SINAUT ST7 protocol</li> <li>product function / data buffering if connection is aborted</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes Yes Yes Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> <li>SINAUT ST7 protocol</li> <li>product function / data buffering if connection is aborted</li> <li>number of data points per station / maximum</li> <li>transmission format</li> <li>for SINAUT ST7 protocol with multi-master polling /</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes Yes Yes Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection <ul> <li>by means of a permanent connection</li> </ul> </li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> <li>SINAUT ST7 protocol</li> <li>product function / data buffering if connection is aborted</li> <li>number of data points per station / maximum</li> <li>transmission format</li> <li>for SINAUT ST7 protocol with multi-master polling / 10-bit</li> <li>for SINAUT ST7 protocol with polling or</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes Yes Yes Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams 500
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> <li>SINAUT ST7 protocol</li> <li>product function / data buffering if connection is aborted</li> <li>number of data points per station / maximum</li> <li>transmission format</li> <li>for SINAUT ST7 protocol with multi-master polling / 10-bit</li> <li>for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes Yes Yes Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams 500  Yes
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<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> <li>SINAUT ST7 protocol</li> <li>product function / data buffering if connection is aborted</li> <li>number of data points per station / maximum</li> <li>transmission format</li> <li>for SINAUT ST7 protocol with multi-master polling / 10-bit</li> <li>for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit</li> <li>operating mode for scanning of data transmission</li> <li>with dedicated line/radio link / with SINAUT ST7 protocol</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes Yes Yes Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams 500  Yes Yes
<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> <li>SINAUT ST7 protocol</li> <li>product function / data buffering if connection is aborted number of data points per station / maximum</li> <li>transmission format</li> <li>for SINAUT ST7 protocol with multi-master polling / 10-bit</li> <li>for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit</li> <li>operating mode for scanning of data transmission</li> <li>with dedicated line/radio link / with SINAUT ST7 protocol</li> <li>with dial-up network / with SINAUT ST7 protocol</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes Yes Yes Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams 500  Yes Yes
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<ul> <li>node station</li> <li>substation</li> <li>TIM control center</li> <li>note</li> <li>control center connection</li> <li>by means of a permanent connection</li> <li>protocol / is supported</li> <li>DNP3</li> <li>IEC 60870-5</li> <li>SINAUT ST7 protocol</li> <li>product function / data buffering if connection is aborted number of data points per station / maximum</li> <li>transmission format</li> <li>for SINAUT ST7 protocol with multi-master polling / 10-bit</li> <li>for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit</li> <li>operating mode for scanning of data transmission</li> <li>with dedicated line/radio link / with SINAUT ST7 protocol</li> <li>with dial-up network / with SINAUT ST7 protocol</li> <li>hamming distance</li> <li>for SINAUT ST7 protocol</li> <li>performance data / teleservice</li> <li>diagnostics function / online diagnostics with SIMATIC STEP 7</li> </ul>	Yes No Ethernet and TS Module can be operated in parallel control center with ST7 function supported  Yes Yes Yes Yes Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams 500  Yes Polling spontaneous  4

<ul> <li>remote firmware update</li> </ul>	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
<ul> <li>for PG configuring / required / SINAUT ST7</li> </ul>	Yes
configuration software for PG	
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	
<ul> <li>password protection for teleservice access</li> </ul>	No
<ul> <li>encrypted data transmission</li> </ul>	Yes
MSC client via GPRS modem with MSC capability	Yes
protocol	
<ul> <li>is supported / MSC protocol</li> </ul>	Yes
with Virtual Private Network MSC / is supported	TCP/IP
key length / for MSC / with Virtual Private Network	128 bit
number of possible connections	
<ul> <li>as MSC client / with VPN connection</li> </ul>	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 / hazardous environment	nents
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
accessories	
accessories	TS Module RS232 or TS Module MODEM or TS Module ISDN or TS Module GSM pluggable
further information / internet-Links	
Internet-Link	
• to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
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)

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