# **SIEMENS**

## **Data sheet**

## 6GK7443-1RX00-0XE0

### product type designation



## CP 443-1 RNA

Communications processor CP 443-1 RNA; 1x 10/100 Mbit/s RJ45 port; ISO; S7, H-communic., open comm. (send/receive) S7 routing; 2x 100 Mbit/s RJ45 port: PRP; ISO; ISO-on-TCP; TCP; UDP S7, H-communic., open comm. (send/receive) S7 routing; time synchronization; IP access Control List; Web diagnostics; SNMPV1.

transfer rate	
transfer rate	
at the 1st interface	10 100 Mbit/s
at the 2nd interface	100 Mbit/s
interfaces	
number of interfaces / according to Industrial Ethernet	3
number of electrical connections	
<ul> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>	1
at the 2nd interface / according to Industrial Ethernet	2
type of electrical connection	
<ul> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>	RJ45 port
<ul> <li>at the 2nd interface / according to Industrial Ethernet</li> </ul>	RJ45 port
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	
<ul> <li>during operation</li> </ul>	0 60 °C
during storage	-40 +70 °C
during transport	-40 +70 °C
relative humidity	
<ul> <li>at 25 °C / without condensation / during operation / maximum</li> </ul>	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 / gene	eral
number of units	
• per CPU / maximum	14
performance data / open communication	

number of possible connections / for open communication / by	64
means of SEND/RECEIVE blocks / maximum	
data volume	
<ul> <li>as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>	8 Kibyte
<ul> <li>as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>	8 Kibyte
<ul> <li>as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>	8 Kibyte
<ul> <li>as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>	2 Kibyte
number of possible connections / for open communication	
<ul> <li>by means of T blocks / maximum</li> </ul>	64
data volume	
as user data per ISO on TCP connection / for open	1452 byte
communication / by means of T blocks / maximum	
performance data / S7 communication	
number of possible connections / for S7 communication	
• maximum	128; when using several CPUs
<ul><li>with PG connections / maximum</li></ul>	2
performance data / multi-protocol mode	
number of active connections / with multi-protocol mode	128
product functions / management, configuration, engineering	
protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
configuration software	
• required	STEP 7 V5.5 SP2 + HSP or higher
product function / is supported / identification link	Yes; according to IEC 61406-1:2022
product functions / diagnostics	1.60; according to 12.0 01400 1.2022
	Vas
product function / web-based diagnostics	Yes
product function / web-based diagnostics product functions / redundancy	Yes
product function / web-based diagnostics product functions / redundancy product function	
product function / web-based diagnostics product functions / redundancy product function • ring redundancy	No
product function / web-based diagnostics product functions / redundancy product function	
product function / web-based diagnostics product functions / redundancy product function • ring redundancy • redundancy manager	No No
product function / web-based diagnostics product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and	No No Yes
product function / web-based diagnostics product functions / redundancy  product function     • ring redundancy     • redundancy manager     • Parallel Redundancy Protocol (PRP)/operation in the PRP-network     • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling	No No Yes No
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)	No No Yes No
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security	No No Yes No
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • ACL - IP-based	No No Yes No
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • ACL - IP-based  • ACL - IP-based for PLC/routing	No No Yes No Yes Yes
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • ACL - IP-based  • ACL - IP-based for PLC/routing  • switch-off of non-required services	No No Yes No Yes Yes Yes Yes
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • ACL - IP-based  • ACL - IP-based for PLC/routing  • switch-off of non-required services  • blocking of communication via physical ports	No No Yes No Ves Yes Yes Yes Yes Yes
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • 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	No No Yes No Yes Yes Yes Yes
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • 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  product functions / time	No No Yes No No Yes Yes Yes Yes Yes Yes No
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • 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  product functions / time  product function / SICLOCK support	No No Yes No Ves Yes Yes Yes Yes Yes Yes No
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • 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  product function / SICLOCK support  product function / pass on time synchronization	No No Yes No No Yes Yes Yes Yes Yes Yes No
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported	No No Yes No No Yes Yes Yes Yes Yes Yes No
product function / web-based diagnostics  product function  • ring redundancy • redundancy manager • Parallel Redundancy Protocol (PRP)/operation in the PRP-network • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported • NTP	No No Yes No No Yes Yes Yes Yes Yes Yes Yes Yes Yes
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported  • NTP  • NTP (secure)	No No Yes No No Yes Yes Yes Yes Yes Yes No
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported  • NTP  • NTP (secure)  standards, specifications, approvals	No No Yes No No Yes Yes Yes Yes Yes Yes Yes Yes Yes
product function / web-based diagnostics  product function  • ring redundancy • redundancy manager • Parallel Redundancy Protocol (PRP)/operation in the PRP-network • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported • NTP • NTP (secure)  standards, specifications, approvals  reference code	No No Yes No No Yes
product function / web-based diagnostics  product function  • ring redundancy • redundancy manager • Parallel Redundancy Protocol (PRP)/operation in the PRP-network • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported • NTP • NTP (secure)  standards, specifications, approvals  reference code • according to IEC 81346-2:2019	No No Yes No No Yes
product function / web-based diagnostics  product function  • ring redundancy • redundancy manager • Parallel Redundancy Protocol (PRP)/operation in the PRP-network • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported • NTP • NTP (secure)  standards, specifications, approvals  reference code	No No Yes No No Yes
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product function / web-based diagnostics  product function  • ring redundancy • redundancy • redundancy manager • Parallel Redundancy Protocol (PRP)/operation in the PRP-network • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported • NTP • NTP (secure)  standards, specifications, approvals  reference code • according to IEC 81346-2:2019  standards, specifications, approvals / Environmental Product D	No No Yes No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes KEC Geclaration
product function / web-based diagnostics  product functions / redundancy  product function  • ring redundancy  • redundancy manager  • Parallel Redundancy Protocol (PRP)/operation in the PRP-network  • High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling  protocol / is supported / Media Redundancy Protocol (MRP)  product functions / security  product function  • 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  product function / SICLOCK support  product function / pass on time synchronization  protocol / is supported  • NTP  • NTP (secure)  standards, specifications, approvals  reference code  • according to IEC 81346-2:2019  standards, specifications, approvals / Environmental Product Declaration	No No Yes No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes KEC Geclaration

• during manufacturing

during operation

after end of life

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, 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 and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

#### Approvals / Certificates

#### **General Product Approval**



**Declaration of Con**formity









**General Product Ap**proval

**EMV** 

For use in hazardous locations



<u>KC</u>





<u>FM</u>

CCC-Ex

For use in hazard-

Marine / Shipping











NK / Nippon Kaiji Ky-<u>okai</u>

Marine / Shipping



CCS (China Classification Society)

Confirmation

**Environment** 



last modified:

8/22/2024

