

product type designation



CP 442-1 RNA

Communications processor CP 442-1 RNA 1x 10/100 Mbit/s RJ45 port: ISO; S7, H communication, open communication (send/receive) S7 routing. 2x 100 Mbit/s, RJ45 port: PRP; ISO; ISO-on-TCP; TCP; UDP S7, H communication, open communication (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	
• at the 1st interface / according to Industrial Ethernet	1
• at the 2nd interface / according to Industrial Ethernet	2
type of electrical connection	
• at the 1st interface / according to Industrial Ethernet	RJ45 port
• at the 2nd interface / according to Industrial Ethernet	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]	7.25 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	
• per CPU / maximum	14

performance data / open communication

number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum data volume	64
• 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
---	-----

product functions / management, configuration, engineering

product function / MIB support	Yes
protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
configuration software	
• required	STEP 7 V5.5 SP2 + HSP 1098 or higher

product functions / diagnostics

product function / web-based diagnostics	Yes
--	-----

product functions / redundancy

product function	
• ring redundancy	No
• redundancy manager	No
• Parallel Redundancy Protocol (PRP)/operation in the PRP-network	Yes
• High-availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) coupling	No
protocol / is supported / Media Redundancy Protocol (MRP)	No

product functions / security

product function	
• ACL - IP-based	Yes
• ACL - IP-based for PLC/routing	Yes
• 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

standards, specifications, approvals / hazardous environments

certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
--	-----

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
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAX-Download-Manager
- to website: Industry Online Support

<http://www.siemens.com/simatic-net>
<https://mall.industry.siemens.com>
<http://www.siemens.com/industry/infocenter>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<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)

last modified:

7/7/2022 