

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	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
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 function / is supported / identification link	Yes; according to IEC 61406-1:2022
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	
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	350.22 kg

- 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

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Approvals / Certificates

General Product Approval



EG-Konf.

[Declaration of Conformity](#)



CCC



UL

General Product Approval

EMV

For use in hazardous locations



RCM

[KC](#)



ATEX



IECEx

[FM](#)

[CCC-Ex](#)

For use in hazardous locations

Marine / Shipping



UL



ABS



BUREAU
VERITAS



DNV



URS

[NK / Nippon Kaiji Kyokai](#)

Marine / Shipping

Environment



PRS



RINA

[Confirmation](#)



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