

### 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 / acc. to Industrial Ethernet

3

#### Number of electrical connections

- |  |   |
|--|---|
| • at the 1st interface / acc. to Industrial Ethernet | 1 |
| • at the 2nd interface / acc. to Industrial Ethernet | 2 |

#### Type of electrical connection

- |  |           |
|--|-----------|
| • at the 1st interface / acc. to Industrial Ethernet | RJ45 port |
| • at the 2nd interface / acc. 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	
<ul style="list-style-type: none"> <li>• from backplane bus / at DC / at 5 V / typical</li> </ul>	1.8 A
Power loss [W]	7.25 W

### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	0 ... 60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
Relative humidity	
<ul style="list-style-type: none"> <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 / general

Number of units	
<ul style="list-style-type: none"> <li>• per CPU / maximum</li> </ul>	14

### Performance data / open communication

Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	64
Amount of data	
<ul style="list-style-type: none"> <li>• as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>	8 Kibyte
<ul style="list-style-type: none"> <li>• as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>	8 Kibyte
<ul style="list-style-type: none"> <li>• as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>	8 Kibyte
<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• by means of T blocks / maximum</li> </ul>	64
Amount of data	

- 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
- with PG connections / maximum

128; when using several CPUs

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
- DCP

Yes

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
- 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

Protocol / is supported / Media Redundancy Protocol (MRP)

No

#### 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

Yes

Yes

Yes

Yes

No

#### Product functions / time

Product function / SICLOCK support

Yes

Product function / pass on time synchronization

Yes

Protocol / is supported	Yes
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- NTP

### Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAx Download Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a></p> <p><a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></p> <p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>

### Security information

Security information	<p>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 <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <a href="http://support.automation.siemens.com">http://support.automation.siemens.com</a>. (V3.4)</p>
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