

### Product type designation

### CP 443-1 OPC UA

Communications processor CP 443-1 OPC UA; 1x 10/100/1000 Mbit/s RJ 45 port; OPC UA communic. (Data Access). Operation as OPC UA server Operation as OPC UA client via Programmable user block according to PLCopen, OPC UA-compliant security mechanisms Programming device communication Time synchronization Web diagnostics OPC UA server Certification



### Transmission rate

#### Transfer rate

- for Industrial Ethernet

10 ... 1000 Mbit/s

### Interfaces

#### Number of interfaces / acc. to Industrial Ethernet

1

#### Type of electrical connection

- of Industrial Ethernet interface

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

1.3 A

#### Power loss [W]

6.5 W

### Permitted 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 / at 25 °C / without condensation / during operation / maximum | 95 %           |
| Protection class IP                                                              | IP20           |

#### Design, dimensions and weight

|               |                                    |
|---------------|------------------------------------|
| Module format | Compact module S7-400 single width |
| Width         | 25 mm                              |
| Height        | 290 mm                             |
| Depth         | 210 mm                             |
| Net weight    | 0.7 kg                             |

#### Product properties, functions, components / general

|                                                                       |   |
|-----------------------------------------------------------------------|---|
| Number of units                                                       |   |
| <ul style="list-style-type: none"> <li>• per CPU / maximum</li> </ul> | 1 |

#### Performance data / S7 communication

|                                                                                   |   |
|-----------------------------------------------------------------------------------|---|
| Number of possible connections / for S7 communication                             |   |
| <ul style="list-style-type: none"> <li>• with PG connections / maximum</li> </ul> | 2 |

#### Performance data / as OPC UA server

|                                                                                              |            |
|----------------------------------------------------------------------------------------------|------------|
| Protocol / is supported / OPC UA Server                                                      | Yes        |
| Number of possible connections / to OPC UA clients / maximum                                 | 10         |
| Number of variables (items) / maximum                                                        | 64000      |
| Storage capacity / for variables (items) in summary                                          | 64000 byte |
| Number of monitorings (subscriptions)                                                        |            |
| <ul style="list-style-type: none"> <li>• per connection / maximum permissible</li> </ul>     | 5          |
| Number of variables (items)                                                                  |            |
| <ul style="list-style-type: none"> <li>• per monitoring (subscriptions) / maximum</li> </ul> | 900        |
| Storage capacity / for monitored variables (items)                                           | 45000 byte |
| Queue size / per monitored variable (item)                                                   | 2          |

#### Performance data / as OPC UA client

|                                                                              |       |
|------------------------------------------------------------------------------|-------|
| Protocol / is supported / OPC UA Client                                      | Yes   |
| Number of possible connections / for OPC UA server / maximum                 | 5     |
| Number of variables (items) / over all connections reading/writing / maximum | 10000 |
| Protocol / is supported                                                      |       |
| <ul style="list-style-type: none"> <li>• SNMP v1</li> </ul>                  | Yes   |
| <ul style="list-style-type: none"> <li>• SNMP v3</li> </ul>                  | Yes   |
| Configuration software                                                       |       |

- required

STEP 7 V5.5 SP4 HF10 or higher / STEP 7 Professional V14 (TIA Portal) or higher

#### Product functions / Diagnosis

|                                          |     |
|------------------------------------------|-----|
| Product function / Web-based diagnostics | Yes |
|------------------------------------------|-----|

#### Product functions / Security

|                                            |     |
|--------------------------------------------|-----|
| Product function                           |     |
| • password protection for Web applications | Yes |
| • encrypted data transmission              | Yes |
| • switch-off of non-required services      | Yes |
| • log file for unauthorized access         | Yes |

#### Product functions / Time

|                         |     |
|-------------------------|-----|
| Protocol / is supported |     |
| • NTP                   | Yes |
| • NTP (secure)          | Yes |

#### Further Information / Internet Links

|                                                   |                                                                                                     |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Internet-Link                                     |                                                                                                     |
| • to website: Selector SIMATIC NET SELECTION TOOL | <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>                               |
| • to website: Industrial communication            | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>                 |
| • to website: Industry Mall                       | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>                   |
| • to website: Information and Download Center     | <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> |
| • to website: Image database                      | <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>             |
| • to website: CAx Download Manager                | <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                 |
| • to website: Industry Online Support             | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>             |

#### 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> |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

last modified:

12/20/2018