

Product type designation

CP 1542SP-1 IRC
COMMUNICATION PROCESSOR



Transmission rate

Transfer rate

- at the 1st interface

10 ... 100 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet

1

Number of electrical connections

- at the 1st interface / acc. to Industrial Ethernet

2

Type of electrical connection

- at the 1st interface / acc. to Industrial Ethernet

via ET200SP bus adaptor (RJ45, FC, LC, SCRJ), switch integrated

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage

DC

Supply voltage

24 V

Supply voltage

19.2 ... 28.8 V

Power loss [W]

2.64 W

Permitted ambient conditions

Ambient temperature

<ul style="list-style-type: none"> • for vertical installation / during operation 	0 ... 50 °C
<ul style="list-style-type: none"> • for horizontally arranged busbars / during operation 	0 ... 60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP20

Design, dimensions and weight	
Width	60 mm
Height	117 mm
Depth	74 mm
Net weight	0.18 kg
Mounting type	
<ul style="list-style-type: none"> • 35 mm DIN rail mounting 	Yes

Product properties, functions, components / general	
Number of units	
<ul style="list-style-type: none"> • per CPU / maximum 	2
<ul style="list-style-type: none"> • Note 	2 CPs can be plugged in per CPU, simultaneous operation with BA Send and CM DP is possible

Performance data / open communication	
Number of possible connections / for open communication	
<ul style="list-style-type: none"> • by means of T blocks / maximum 	32
Amount of data	
<ul style="list-style-type: none"> • as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum 	65536 byte

Performance data / S7 communication	
Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> • maximum 	16
<ul style="list-style-type: none"> • with OP connections / maximum 	16

Performance data / multi-protocol mode	
Number of active connections / with multi-protocol mode	32

Performance data / telecontrol	
Suitability for use	
<ul style="list-style-type: none"> • Node station 	No
<ul style="list-style-type: none"> • substation 	Yes
<ul style="list-style-type: none"> • TIM control center 	No

Control center connection	IEC 60870-5, DNP3, (Modbus TCP using software components of the CPU) capable control stations and connection to Telecontrol Server Basic
<ul style="list-style-type: none"> • by means of a permanent connection • by means of demand-oriented connection • Note 	supported supported Connection to SCADA system using IEC 60870-5 104, DNP3 and Telecontrol Server Basic
Protocol / is supported	
<ul style="list-style-type: none"> • TCP/IP • DNP3 • IEC 60870-5 	Yes Yes Yes
Product function / data buffering if connection is aborted	Yes
Number of data points per station / maximum	500
Product function / MIB support	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 • SNMP v3 • DCP • LLDP 	Yes No Yes Yes
Configuration software	
<ul style="list-style-type: none"> • required 	STEP 7 Professional V14 (TIA Portal) or higher
Identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information • I&M1 – higher-level designation/location designation 	Yes Yes

Product functions / Diagnosis

Product function / Web-based diagnostics	Yes; yes, via ET 200SP CPU
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Product functions / Security

Product function	
<ul style="list-style-type: none"> • Blocking of communication via physical ports 	Yes

Product functions / Time

Product function / SICLOCK support	Yes
Product function / pass on time synchronization	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • NTP • NTP (secure) 	Yes No
time synchronization	
<ul style="list-style-type: none"> • from NTP-server • from control center 	Yes Yes

Further Information / Internet Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET 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/snst 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	<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 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)</p>
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