

Product type designation

CP 1542SP-1

COMMUNICATION PROCESSOR CP 1542SP-1 FOR CONNECTING INDUSTRIAL ETHERNET: INDUSTRIAL ETHERNET: OPEN IE COMMUNICATION (TCP/IP, ISO-ON-TCP, UDP), PG/OP, S7 ROUTING, IP-BROADCAST/MULTICAST, SNMPV1, DHCP, E-MAIL, IPV4/IPV6, TIME SYNCHRONISATION VIA NTP, ACCESS TO WEB SERVER OF CPU, BUS ADAPTER REQUIRED



Transmission rate

Transfer rate	
<ul style="list-style-type: none"> at the 1st interface 	10 ... 100 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
<ul style="list-style-type: none"> at the 1st interface / acc. to Industrial Ethernet 	2
Type of electrical connection	
<ul style="list-style-type: none"> 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]	6 W

Permitted ambient conditions

Ambient temperature	
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<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
Product function / MIB support	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v3 	No
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	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 	Yes
<ul style="list-style-type: none"> • I&M1 – higher-level designation/location designation 	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	No
Protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • NTP (secure) 	No
time synchronization	
<ul style="list-style-type: none"> • from NTP-server 	Yes

Further Information / Internet Links

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

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