

product type designation



CP 1542SP-1 IRC

Communications Processor CP 1542SP-1 IRC for connection of an SIMATIC S7-ET 200SP to Industrial Ethernet, SINAUT ST7, TeleControl Server Basic, IEC-60870-5-104 or DNP3 protocol to a control center; Open IE communication (TCP/IP, ISO-on-TCP, UDP), IP broadcast/multicast, SNMPV1, DHCP, Secure e-Mail, IPV4/IPV6, support of SINEMA Remote Connect with autoconfiguration; time-of-day synchronization via NTP, access to web server of the CPU, bus adapter required

transfer 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 ET 200SP bus adapter (RJ45, FC, SCRJ), integrated switch
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
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> for vertical installation / during operation for horizontally arranged busbars / during operation during storage during transport 	-30 ... +50 °C -30 ... +60 °C -40 ... +70 °C -40 ... +70 °C
relative humidity	
<ul style="list-style-type: none"> at 25 °C / without condensation / during operation / maximum 	95 %
protection class IP	IP20
design, dimensions and weights	
width	60 mm
height	117 mm
depth	74 mm
net weight	0.18 kg
fastening method	
<ul style="list-style-type: none"> 35 mm top hat DIN rail mounting 	Yes
product features, product functions, product components / general	
number of units	
<ul style="list-style-type: none"> per CPU / maximum note 	2 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
data volume	
<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 / IT functions	
number of possible connections	
<ul style="list-style-type: none"> as email client / maximum 	1
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 by block solutions of the CPU) capable control stations, connection to Telecontrol Server Basic and ST7 capable control station
<ul style="list-style-type: none"> by means of a permanent connection 	supported
<ul style="list-style-type: none"> by means of demand-oriented connection 	supported
<ul style="list-style-type: none"> note 	Connection to SCADA system by IEC 60870-5 104, DNP3, Telecontrol Server Basic and ST7 capable control center
protocol / is supported	
<ul style="list-style-type: none"> DNP3 	Yes
<ul style="list-style-type: none"> IEC 60870-5 	Yes
<ul style="list-style-type: none"> SINAUT ST7 protocol 	Yes
product function / data buffering if connection is aborted	Yes; TCSB 64000 events, SINAUT ST7 32000 telegrams, DNP3 100000 events, IEC 60870-5 100000 events
number of data points per station / maximum	1500
number of stations / for direct communication / with Telecontrol Server Basic	
<ul style="list-style-type: none"> in send direction / maximum 	3
<ul style="list-style-type: none"> in receive direction / maximum 	15
product functions / management, configuration, engineering	
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 	Yes
<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 / diagnostics	
product function / web-based diagnostics	Yes; via ET 200SP CPU
product functions / security	
product function / with VPN connection	SINEMA RC
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	Yes
<ul style="list-style-type: none"> • NTP • NTP (secure) 	No
time synchronization	Yes
<ul style="list-style-type: none"> • from NTP-server • from control center 	Yes
standards, specifications, approvals / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
further information / internet-Links	
Internet-Link	
<ul style="list-style-type: none"> • to web page: selection aid TIA 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/tia-selection-tool 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	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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