

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 email, IPv4/IPv6, support of SINEMA Remote Connect with autoconfiguration; time-of-day synchronization via NTP, access to web server of CPU, BusAdapter required.

transfer rate

transfer rate	
• at the 1st interface	10 ... 100 Mbit/s

interfaces

number of interfaces / according to Industrial Ethernet	1
number of electrical connections	
• at the 1st interface / according to Industrial Ethernet	2
type of electrical connection	
• at the 1st interface / according 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	
• for vertical installation / during operation	-30 ... +50 °C
• for horizontally arranged busbars / during operation	-30 ... +60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
relative humidity	
• 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	
• 35 mm top hat DIN rail mounting	Yes

product features, product functions, product components / general

number of units	
• per CPU / maximum	2
• 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	
• by means of T blocks / maximum	32

data volume	
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	
maximum	16
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	
as email client / maximum	1
performance data / telecontrol	
suitability for use	
node station	No
substation	Yes
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
by means of a permanent connection	supported
by means of demand-oriented connection	supported
note	Connection to SCADA system by IEC 60870-5 104, DNP3, Telecontrol Server Basic and ST7 capable control center
protocol / is supported	
DNP3	Yes
IEC 60870-5	Yes
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	
in send direction / maximum	3
in receive direction / maximum	15
product functions / management, configuration, engineering	
product function / MIB support	Yes
protocol / is supported	
SNMP v1	Yes
SNMP v3	Yes
DCP	Yes
LLDP	Yes
configuration software	
required	STEP 7 Professional V14 (TIA Portal) or higher
identification & maintenance function	
I&M0 - device-specific information	Yes
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	
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	
NTP	Yes
NTP (secure)	No
time synchronization	
from NTP-server	Yes
from control center	Yes

standards, specifications, approvals

reference code

- according to IEC 81346-2:2019

KEC

standards, specifications, approvals / Environmental Product Declaration

Environmental Product Declaration

Yes

global warming potential [CO2 eq]

- total
- during manufacturing
- during operation
- after end of life

207.05 kg

19.13 kg

187.74 kg

0.18 kg

further information / internet links

internet link

- to web page: selection aid TIA Selection Tool
- to website: Industrial communication
- to web page: SiePortal
- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

<https://www.siemens.com/tstcloud><https://www.siemens.com/simatic-net><https://sieportal.siemens.com/><https://www.automation.siemens.com/bilddb><https://siemens.com/cax><https://support.industry.siemens.com>

security information

security information

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Approvals / Certificates

General Product Approval



EG-Konf.

[Declaration of Conformity](#)

CCC



UL



RCM

For use in hazardous locations



ATEX



IECEX

[CCC-Ex](#)[Confirmation](#)

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