

### Product type designation

### SIPLUS ET 200SP CP 1542SP-1 IRC TX RAIL

SIPLUS ET 200SP CP 1542SP-1 IRC TX RAIL -40...+70°C TX with 85°C for 10min with conformal coating based on 6GK7542-6VX00-0XE0 . 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



Figure similar

Transfer rate	
Transfer rate	
<ul style="list-style-type: none"> <li>at the 1st interface</li> </ul>	10 ... 100 Mbit/s
Interfaces	
Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
<ul style="list-style-type: none"> <li>at the 1st interface / acc. to Industrial Ethernet</li> </ul>	2
Type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / acc. to Industrial Ethernet</li> </ul>	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"> <li>• for vertical installation / during operation</li> <li>• for horizontally arranged busbars / during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	<p>-40 ... +50 °C</p> <p>-40 ... +70 °C</p> <p>-40 ... +70 °C</p> <p>-40 ... +70 °C</p>
Installation altitude / at height above sea level / maximum	2000 m
Ambient condition / relating to ambient temperature - air pressure - installation altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Relative humidity	
<ul style="list-style-type: none"> <li>• with condensation / acc. to IEC 60068-2-38 / maximum</li> </ul>	100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation
Chemical resistance / to commercially available cooling lubricants	Yes; incl. airborne diesel and oil droplets
Resistance to biologically active substances	
<ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> <li>• conformity acc. to EN 60721-3-5</li> </ul>	<p>Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request</p> <p>Yes; Class 5B2 mold and fungal spores (excluding fauna), Class 5B3 on request</p>
Resistance to chemically active substances	
<ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> <li>• conformity acc. to EN 60721-3-5</li> </ul>	<p>Yes; Class 3C4 (RH &lt; 75 %) incl. salt spray in accordance with EN 60068-2-52 (Severity 3). The supplied plug covers must remain in place on the unused interfaces during operation.</p> <p>Yes; Class 5C3 (RH &lt; 75 %) incl. salt spray in accordance with EN 50155 (ST2). The supplied plug covers must remain in place over the unused interfaces during operation.</p>
Resistance to mechanically active substances	
<ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> <li>• conformity acc. to EN 60721-3-5</li> </ul>	<p>Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.</p> <p>Yes; Class 5S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.</p>
Coating / for equipped printed circuit board / acc. to EN 61086	Yes; Class 2 for high availability
Type of coating / protection against pollution according to EN 60664-3	Yes; Protection of the type 1
Type of coating / for electronic devices in railway applications acc. to EN 50155	Yes; Protective coating of the Class PC2 according to EN 50155:2017
Type of test / of the coating / acc. to MIL-I-46058C	Yes; Coating discoloration during service life possible
Product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A	Yes; Conformal coating, class A
Protection class IP	IP20
<b>Design, dimensions and weights</b>	
Width	60 mm

Height	117 mm
Depth	74 mm
Net weight	0.18 kg
Mounting type	Yes
<ul style="list-style-type: none"> <li>• 35 mm DIN rail mounting</li> </ul>	

#### Product features, product functions, product components / general

Number of units	2
<ul style="list-style-type: none"> <li>• per CPU / maximum</li> <li>• Note</li> </ul>	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	32
<ul style="list-style-type: none"> <li>• by means of T blocks / maximum</li> </ul>	
Amount of data	65536 byte
<ul style="list-style-type: none"> <li>• as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum</li> </ul>	

#### Performance data / S7 communication

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

#### Performance data / multi-protocol mode

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

Number of possible connections	1
<ul style="list-style-type: none"> <li>• as e-mail client / maximum</li> </ul>	

#### Performance data / telecontrol

Suitability for use	No
<ul style="list-style-type: none"> <li>• Node station</li> <li>• substation</li> <li>• TIM control center</li> </ul>	Yes
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"> <li>• by means of a permanent connection</li> <li>• by means of demand-oriented connection</li> <li>• Note</li> </ul>	supported supported 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	500
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	No
• 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
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### 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

### Further information / Internet-Links

Internet-Link	
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- 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

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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