

### product type designation



Figure similar

### SIPLUS ET 200SP CP 1543SP-1 ISEC TX RAIL

SIPLUS ET 200SP CP 1543SP-1 ISEC TX rail based on 6GK7543-6WX00-0XE0 with conformal coating, -40...+70 °C, OT4 with ST1/2 (+85 °C for 10 minutes), security (firewall and VPN) open IE communication (TCP/IP, ISO-on-TCP, UDP) PG/OP, S7 routing, IP broadcast/multicast, SNMPV1/V3, DHCP, secure email, IPv4/IPv6, support of SINEMA Remote Connect with autoconfiguration, time synchronization via NTP, access to web server of CPU, BusAdapter required

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 / according to Industrial Ethernet	1
number of electrical connections	
<ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>	2
type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / according 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> <li>note</li> </ul>	-40 ... +50 °C -40 ... +70 °C -40 ... +70 °C -40 ... +70 °C +85 °C for 10 min (OT4, ST1/ST2 according to EN 50155)
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 / according 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 according to EN 60721-3-3</li> <li>conformity according to EN 60721-3-5</li> </ul>	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request Yes; Class 5B2 mold and fungal spores (excluding fauna), Class 5B3 on request
resistance to chemically active substances	
<ul style="list-style-type: none"> <li>conformity according to EN 60721-3-3</li> <li>conformity according to EN 60721-3-5</li> </ul>	Yes; Class 3C4 (RH < 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. Yes; Class 5C3 (RH < 75%) including salt spray acc. to EN 60068-2-52 (Severity level 3). The supplied plug covers must remain in place over the unused interfaces during operation!

resistance to mechanically active substances	
<ul style="list-style-type: none"> <li>conformity according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
<ul style="list-style-type: none"> <li>conformity according to EN 60721-3-5</li> </ul>	Yes; Class 5S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
coating / for equipped printed circuit board / according 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 according to EN 50155	Yes; Protective coating of the Class PC2 according to EN 50155:2017
type of test / of the coating / according 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 according 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
fastening method	
<ul style="list-style-type: none"> <li>35 mm top hat DIN rail mounting</li> </ul>	Yes
<b>product features, product functions, product components / general</b>	
number of units	
<ul style="list-style-type: none"> <li>per CPU / maximum</li> <li>note</li> </ul>	2 2 CPUs can be plugged in per CPU, simultaneous operation with BA Send and CM DP is possible
<b>performance data / open communication</b>	
number of possible connections / for open communication	
<ul style="list-style-type: none"> <li>by means of T blocks / maximum</li> </ul>	32
data volume	
<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>	65536 byte
<b>performance data / S7 communication</b>	
number of possible connections / for S7 communication	
<ul style="list-style-type: none"> <li>maximum</li> <li>with OP connections / maximum</li> </ul>	16 16
<b>performance data / multi-protocol mode</b>	
number of active connections / with multi-protocol mode	32
<b>performance data / IT functions</b>	
number of possible connections	
<ul style="list-style-type: none"> <li>as email client / maximum</li> </ul>	1
<b>product functions / management, configuration, engineering</b>	
product function / MIB support	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>SNMP v1</li> <li>SNMP v3</li> <li>DCP</li> <li>LLDP</li> </ul>	Yes Yes Yes Yes
configuration software	
<ul style="list-style-type: none"> <li>required</li> </ul>	STEP 7 Professional V14 (TIA Portal) or higher
identification & maintenance function	
<ul style="list-style-type: none"> <li>I&amp;M0 - device-specific information</li> <li>I&amp;M1 - higher level designation/location designation</li> </ul>	Yes Yes
<b>product functions / diagnostics</b>	
product function / web-based diagnostics	Yes; via ET 200SP CPU
<b>product functions / security</b>	
firewall version	stateful inspection
product function / with VPN connection	IPsec, SINEMA RC
type of encryption algorithms / with VPN connection	AES-256, AES-192, AES-128, 3DES-168, DES-56
type of authentication procedure / with VPN connection	Preshared key (PSK), X.509v3 certificates
type of hashing algorithms / with VPN connection	MD5, SHA-1

number of possible connections / with VPN connection	4
product function	
• switch-off of non-required services	Yes
• blocking of communication via physical ports	Yes
• log file for unauthorized access	Yes
<b>product functions / time</b>	
product function / SICLOCK support	Yes
product function / pass on time synchronization	No
protocol / is supported	
• NTP	Yes
• NTP (secure)	Yes
time synchronization	
• from NTP-server	Yes
<b>standards, specifications, approvals</b>	
certificate of suitability	
• fire protection in accordance with EN 45545-2	Yes; Railway vehicles - for proof, see Service & Support
<b>railway application</b>	
certificate of suitability / railway application in accordance with EN 50121-3-2	Yes; EMC for railway vehicles
certificate of suitability / railway application in accordance with EN 50121-4	Yes; EMC for signal and telecommunication equipment
certificate of suitability / railway application in accordance with EN 50124-1	Yes; Railway applications - Overvoltage category OV2 pollution degree PD2 rated impulse voltage UNi = 0.5 kVUNm = DC 24
certificate of suitability / railway application in accordance with EN 50125-1	Yes; Railway vehicles - See ambient conditions
certificate of suitability / railway application in accordance with EN 50125-2	Yes; Fixed-electrical installations - see ambient conditions
certificate of suitability / railway application in accordance with EN 50125-3	Yes; Signal and telecommunications equipment - see Ambient conditions vibrations and shocks: Application point outside the rails (distance 1 m to 3 m from rail)
certificate of suitability / railway application in accordance with EN 50155	Yes; Railway vehicles - temperature class OT4, ST1/ST2, horizontal mounting position
certificate of suitability / railway application in accordance with EN 61373	Yes; Railway vehicles - Vibrations and shocks Category 1 Class A/B
<b>further information / internet links</b>	
internet link	
• to web page: selection aid TIA Selection Tool	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
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 <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a> . To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <a href="http://support.automation.siemens.com">http://support.automation.siemens.com</a> . (V3.4)

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