

### product type designation



### CP 1542SP-1

Communications processor CP 1542SP-1 for connection of an SIMATIC S7-ET 200SP to Industrial Ethernet; open IE communication (TCP/IP, ISO-on-TCP, UDP), PG/OP, S7 routing, IP broadcast/multicast, SNMPV1, DHCP, Email, IPV4/IPV6, time-of-day synchronization via NTP, access to web server of CPU, bus adapter 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> </ul>	-30 ... +50 °C -30 ... +60 °C -40 ... +70 °C -40 ... +70 °C
relative humidity	
<ul style="list-style-type: none"> <li>at 25 °C / without condensation / during operation / maximum</li> </ul>	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"> <li>35 mm DIN-rail mounting</li> </ul>	Yes
product features, product functions, product components / general	
number of units	
<ul style="list-style-type: none"> <li>per CPU / maximum</li> <li>note</li> </ul>	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"> <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> </ul>	16
<ul style="list-style-type: none"> <li>with OP connections / maximum</li> </ul>	16
<b>performance data / multi-protocol mode</b>	
number of active connections / with multi-protocol mode	32
<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> </ul>	Yes
<ul style="list-style-type: none"> <li>SNMP v3</li> </ul>	No
<ul style="list-style-type: none"> <li>DCP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>LLDP</li> </ul>	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> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M1 - higher level designation/location designation</li> </ul>	Yes
<b>product functions / diagnostics</b>	
product function / web-based diagnostics	Yes; via ET 200SP CPU
<b>product functions / security</b>	
product function	
<ul style="list-style-type: none"> <li>blocking of communication via physical ports</li> </ul>	Yes
<b>product functions / time</b>	
product function / SICLOCK support	Yes
product function / pass on time synchronization	No
protocol / is supported	
<ul style="list-style-type: none"> <li>NTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>NTP (secure)</li> </ul>	No
time synchronization	
<ul style="list-style-type: none"> <li>from NTP-server</li> </ul>	Yes
<b>standards, specifications, approvals</b>	
reference code	
<ul style="list-style-type: none"> <li>according to IEC 81346-2:2019</li> </ul>	KEC
<b>standards, specifications, approvals / Environmental Product Declaration</b>	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> <li>total</li> </ul>	207.05 kg
<ul style="list-style-type: none"> <li>during manufacturing</li> </ul>	19.13 kg
<ul style="list-style-type: none"> <li>during operation</li> </ul>	187.74 kg
<ul style="list-style-type: none"> <li>after end of life</li> </ul>	0.18 kg
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>to website: Selection guide for cables and connectors</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
<ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>to website: Industrial communication</li> </ul>	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>to website: CAx-Download-Manager</li> </ul>	<a href="https://siemens.com/cax">https://siemens.com/cax</a>
<ul style="list-style-type: none"> <li>to website: Industry Online Support</li> </ul>	<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 cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is

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**Approvals / Certificates**

**General Product Approval**



[Declaration of Conformity](#)



**General Product Approval**

**For use in hazardous locations**

**Environment**



[CCC-Ex](#)

[Confirmation](#)



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