

### product type designation



### CP 1542-5

Communications processor CP 1542-5 for connection of SIMATIC S7-1500 to PROFIBUS DP, DPV1 master or DP slave, S7 and PG/OP communication, time-of-day synchronization, diagnostics, reduced quantity structure.

transfer rate	
transfer rate	
<ul style="list-style-type: none"> <li>at the 1st interface / according to PROFIBUS</li> </ul>	9.6 kbit/s ... 12 Mbit/s
interfaces	
number of interfaces / according to Industrial Ethernet	0
number of electrical connections	
<ul style="list-style-type: none"> <li>at the 1st interface / according to PROFIBUS</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / according to PROFIBUS</li> </ul>	9-pin Sub-D socket (RS485)
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	DC
supply voltage / 1 / from backplane bus	15 V
relative symmetrical tolerance / at DC	
<ul style="list-style-type: none"> <li>at 15 V</li> </ul>	3 %
consumed current	
<ul style="list-style-type: none"> <li>from backplane bus / at DC / at 15 V / typical</li> </ul>	0.1 A
power loss [W]	1.5 W
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> <li>for vertical installation / during operation</li> </ul>	0 ... 40 °C
<ul style="list-style-type: none"> <li>for horizontally arranged busbars / during operation</li> </ul>	0 ... 60 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-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	
module format	Compact module S7-1500 single width
width	35 mm
height	142 mm
depth	129 mm
net weight	0.27 kg
fastening method	
<ul style="list-style-type: none"> <li>S7-1500 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> </ul>	8

<ul style="list-style-type: none"> <li>• note</li> </ul>	depending on CPU type
<b>performance data / PROFIBUS DP</b>	
service / as DP master <ul style="list-style-type: none"> <li>• DPV1</li> </ul>	Yes
number of DP slaves <ul style="list-style-type: none"> <li>• on DP master / operable</li> </ul>	32
data volume <ul style="list-style-type: none"> <li>• of the address range of the inputs / as DP master / total</li> <li>• of the address range of the outputs / as DP master / total</li> <li>• of the address range of the inputs / per DP slave</li> <li>• of the address range of the outputs / per DP slave</li> </ul>	2048 byte 2048 byte 244 byte 244 byte
service / as DP slave <ul style="list-style-type: none"> <li>• DPV0</li> <li>• DPV1</li> </ul>	Yes Yes
data volume <ul style="list-style-type: none"> <li>• of the address range of the inputs / as DP slave / total</li> <li>• of the address range of the outputs / as DP slave / total</li> </ul>	240 byte 240 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; depending on the system upper limit
<b>performance data / multi-protocol mode</b>	
number of active connections / with multi-protocol mode	16
<b>performance data / telecontrol</b>	
protocol / is supported <ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>	No
<b>product functions / management, configuration, engineering</b>	
configuration software <ul style="list-style-type: none"> <li>• required</li> </ul>	STEP 7 Professional V12 SP1 (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 S7-1500 CPU
<b>product functions / time</b>	
product function / pass on time synchronization	Yes
<b>standards, specifications, approvals / hazardous environments</b>	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
<b>further information / internet-Links</b>	
Internet-Link <ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <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

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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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