

### Product type designation

### CP 1542-5

COMMUNICATION PROCESSOR CP 1542-5 FOR CONNECTING SIMATIC S7-1500 TO PROFIBUS DP DPV1-MASTER OR DP-SLAVE, S7-AND PG/OP COMMUNICATION, CLOCK SYNCHRONISATION DIAGNOSTICS, LESS DATA



### Transmission rate

#### Transfer rate

- at the 1st interface / acc. to PROFIBUS

9.6 kbit/s ... 12 Mbit/s

### Interfaces

Number of interfaces / acc. to Industrial Ethernet

0

Number of electrical connections

- at the 1st interface / acc. to PROFIBUS

1

Type of electrical connection

- at the 1st interface / acc. to PROFIBUS

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

- at 15 V

3 %

Consumed current

- from backplane bus / at DC / at 15 V / typical

0.1 A

Power loss [W]

1.5 W

## Permitted 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 / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP20

## Design, dimensions and weight

Module format	Compact module S7-1500 single width
Width	35 mm
Height	142 mm
Depth	129 mm
Net weight	0.27 kg
Mounting type	
<ul style="list-style-type: none"> <li>• S7-1500 rail mounting</li> </ul>	Yes

## Product properties, functions, 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

## Performance data / PROFIBUS DP

Service / as DP master	
<ul style="list-style-type: none"> <li>• DPV1</li> </ul>	Yes
Number of DP slaves / on DP master / usable	32
Amount of data	
<ul style="list-style-type: none"> <li>• of the address area of the inputs / as DP master / total</li> </ul>	2048 byte
<ul style="list-style-type: none"> <li>• of the address area of the outputs / as DP master / total</li> </ul>	2048 byte
<ul style="list-style-type: none"> <li>• of the address area of the inputs / per DP slave</li> </ul>	244 byte
<ul style="list-style-type: none"> <li>• of the address area of the outputs / per DP slave</li> </ul>	244 byte
Service / as DP slave	
<ul style="list-style-type: none"> <li>• DPV0</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DPV1</li> </ul>	Yes
Amount of data	
<ul style="list-style-type: none"> <li>• of the address area of the inputs / as DP slave / total</li> </ul>	240 byte
<ul style="list-style-type: none"> <li>• of the address area of the outputs / as DP slave / total</li> </ul>	240 byte

Performance data / S7 communication	
Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> <li>• maximum</li> <li>• Note</li> </ul>	16 depending on the system upper limit
Performance data / multi-protocol mode	
Number of active connections / with multi-protocol mode	16
Performance data / telecontrol	
Protocol / is supported	
<ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>	No
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
Product functions / Diagnosis	
Product function / Web-based diagnostics	Yes; yes, via S7-1500 CPU
Product functions / Time	
Product function / pass on time synchronization	Yes
Further Information / Internet Links	
Internet-Link	
<ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET 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/snst">http://www.siemens.com/snst</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>
Security information	

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Security information

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