

### 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

- at the 1st interface / according to PROFIBUS

9.6 kbit/s ... 12 Mbit/s

### interfaces

number of interfaces / according to Industrial Ethernet

0

number of electrical connections

- at the 1st interface / according to PROFIBUS

1

type of electrical connection

- at the 1st interface / according 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

### ambient conditions

ambient temperature

- for vertical installation / during operation
- for horizontally arranged busbars / during operation
- during storage
- during transport

0 ... 40 °C

0 ... 60 °C

-40 ... +70 °C

-40 ... +70 °C

relative humidity

- at 25 °C / without condensation / during operation / maximum

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

- S7-1500 rail mounting

Yes

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

number of units

- per CPU / maximum
- note

8

depending on CPU type

<b>performance data / PROFIBUS DP</b>	
service / as DP master	
• DPV1	Yes
number of DP slaves	
• on DP master / operable	32
data volume	
• of the address range of the inputs / as DP master / total	2048 byte
• of the address range of the outputs / as DP master / total	2048 byte
• of the address range of the inputs / per DP slave	244 byte
• of the address range of the outputs / per DP slave	244 byte
service / as DP slave	
• DPV0	Yes
• DPV1	Yes
data volume	
• of the address range of the inputs / as DP slave / total	240 byte
• of the address range of the outputs / as DP slave / total	240 byte
<b>performance data / S7 communication</b>	
number of possible connections / for S7 communication	
• maximum	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	
• TCP/IP	No
<b>product functions / management, configuration, engineering</b>	
configuration software	
• required	STEP 7 Professional V12 SP1 (TIA Portal) or higher
identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 - higher level designation/location designation	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</b>	
reference code	
• according to IEC 81346-2:2019	KEC
<b>standards, specifications, approvals / Environmental Product Declaration</b>	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
• total	68.56 kg
• during manufacturing	21.24 kg
• during operation	46.97 kg
• after end of life	0.35 kg
<b>further information / internet links</b>	
internet link	
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to website: Industrial communication	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com">https://sieportal.siemens.com</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAX-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
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<b>security information</b>	
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General Product Approval



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