

product type designation



CP 1542-5

***** spare part ***** communications processor CP 1542-5 for connection of SIMATIC S7-1500 to PROFIBUS DP, DPV1 master or DP device, S7 and PG/OP communication, time synchronization, diagnostics, reduced quantity structure.

product brand name

SIMATIC NET

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 0 ... 40 °C
- for horizontally arranged busbars / during operation 0 ... 60 °C
- during storage -40 ... +70 °C
- during transport -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
performance data / PROFIBUS DP	
service / as DP master	
• DPV1	Yes
number of DP devices	
• on DP master / operable	32
data volume	
• of the address range of the inputs / as DP master / total • of the address range of the outputs / as DP master / total • of the address range of the inputs / per DP device • of the address range of the outputs / per DP device	2048 byte 2048 byte 244 byte 244 byte
service / as DP device	
• DPV0 • DPV1	Yes Yes
data volume	
• of the address range of the inputs / as DP device / total • of the address range of the outputs / as DP device / total	240 byte 240 byte
performance data / S7 communication	
number of possible connections / for S7 communication	
• maximum	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	
• TCP/IP	No
product functions / management, configuration, engineering	
configuration software	
• required	STEP 7 Professional V12 SP1 (TIA Portal) or higher
identification & maintenance function	
• I&M0 - device-specific information • I&M1 - higher level designation/location designation	Yes Yes
product functions / diagnostics	
product function / web-based diagnostics	Yes; via S7-1500 CPU
product functions / time	
product function / pass on time synchronization	Yes
standards, specifications, approvals / hazardous environments / header	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total • during manufacturing • during operation • after end of life	68.56 kg 21.24 kg 46.97 kg 0.35 kg
further information / internet links	
internet link	
• to web page: selection aid TIA Selection Tool • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support	https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://siemens.com/cax https://support.industry.siemens.com
security information	
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

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Approvals / Certificates

General Product Approval



[Declaration of Con-
formity](#)



[China RoHS](#)



[Manufacturer Declara-
tion](#)

General Product Approval

For use in hazardous locations



For use in hazardous locations

Environment

[FM](#)

[CCC-Ex](#)



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