

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 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 8
- note depending on CPU type

performance data / PROFIBUS DP

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

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
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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	Yes
• I&M1 - higher level designation/location designation	Yes

product functions / diagnostics

product function / web-based diagnostics	Yes; via S7-1500 CPU
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product functions / time

product function / pass on time synchronization	Yes
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standards, specifications, approvals / hazardous environments

certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
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further information / internet-Links

Internet-Link	
• to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx-Download-Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

security information

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 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 .
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