

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 / 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

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 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	
• 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 / usable	32
Amount of data	
• of the address area of the inputs / as DP master / total	2048 byte
• of the address area of the outputs / as DP master / total	2048 byte
• of the address area of the inputs / per DP slave	244 byte
• of the address area of the outputs / per DP slave	244 byte
Service / as DP slave	
• DPV0	Yes
• DPV1	Yes
Amount of data	
• of the address area of the inputs / as DP slave / total	240 byte

<ul style="list-style-type: none"> • of the address area of the outputs / as DP slave / total 	240 byte
Performance data / S7 communication	
Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • TCP/IP 	No
Product functions / management, configuration, engineering	
Configuration software	
<ul style="list-style-type: none"> • required 	STEP 7 Professional V12 SP1 (TIA Portal) or higher
Identification & maintenance function	
<ul style="list-style-type: none"> • 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
Further information / Internet-Links	
Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAX Download Manager • to website: Industry Online Support 	http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
Security information	

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last modified:

02/12/2020