SIEMENS

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

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	
• 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 properties, functions, 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
• of the address area of the outputs / as DP slave / total	240 byte

Performance data / S7 communication	
Number of possible connections / for S7 communication	
• maximum	16
• Note	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
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 / Diagnosis	
Product function / Web-based diagnostics	Yes; yes, via S7-1500 CPU

Product functions / Time	
Product function / pass on time synchronization	Yes

Accessories	

Further Information / Internet Links	
Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• 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. (V3.4)
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