

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	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> at the 1st interface / according to PROFIBUS 	1
type of electrical connection	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> at 15 V 	3 %
consumed current	
<ul style="list-style-type: none"> from backplane bus / at DC / at 15 V / typical 	0.2 A
power loss [W]	3 W
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> for vertical installation / during operation for horizontally arranged busbars / during operation during storage during transport note 	-25 ... +40 °C -25 ... +60 °C -40 ... +70 °C -40 ... +70 °C without condensation or icing
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	restrictions for installation altitudes > 2 000 m, see manual
relative humidity	
<ul style="list-style-type: none"> 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	0.4 kg
fastening method	
<ul style="list-style-type: none"> S7-1500 rail mounting 	Yes

product features, product functions, product components / general

number of units	8
• per CPU / maximum	depending on CPU type
• note	

performance data / PROFIBUS DP

service / as DP master	Yes
• DPV1	
number of DP slaves	32
• on DP master / operable	
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	Yes
• 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	16; depending on the system upper limit
• maximum	

performance data / multi-protocol mode

number of active connections / with multi-protocol mode	16
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performance data / telecontrol

protocol / is supported	No
• TCP/IP	

product functions / management, configuration, engineering

configuration software	STEP 7 Professional V18 (TIA Portal) or higher
• required	
identification & maintenance function	Yes
• 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; GB3836.1, GB3836.8
certificate of suitability / CCC / for hazardous zone according to GB standard / as marking	Ex nA IIC T4 Gc

standards, specifications, approvals / Environmental Product Declaration

Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
• total	115.52 kg
• during manufacturing	21.24 kg
• during operation	93.93 kg
• after end of life	0.35 kg

further information / internet links

internet link	
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://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 cybersecurity functions that support the secure operation of plants, systems, machines and networks.
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Approvals / Certificates

General Product Approval

Environment



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