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Data sheet 6GK7542-5FX10-0XE0

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	0.2 A
power loss [W]	3 W
ambient conditions	
ambient temperature	
● for vertical installation / during operation	-25 ... +40 °C
● for horizontally arranged busbars / during operation	-25 ... +60 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
installation altitude / at height above sea level / maximum	5000 m
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	0.4 kg
fastening method	
● S7-1500 rail mounting	Yes
product features, product functions, product components / general	
number of units	
● per CPU / maximum	8

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● 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
performance data / telecontrol	
protocol / is supported	
● TCP/IP	No
product functions / management, configuration, engineering	
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
product functions / time	
product function / pass on time synchronization	Yes
standards, specifications, approvals / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
● as marking	Ex nA IIC T4 Gc
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	
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