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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	-30 ... +40 °C
● for horizontally arranged busbars / during operation	-30 ... +60 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
● note	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	
● 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

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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
performance data / telecontrol	
protocol / is supported	
● TCP/IP	No
product functions / management, configuration, engineering	
configuration software	
● required	STEP 7 Professional V18 (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
product functions / time	
product function / pass on time synchronization	Yes
standards, specifications, approvals	
reference code	
● according to IEC 81346-2:2019	KEC
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. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic,

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Approvals / Certificates

General Product Approval			For use in hazardous locations	Environment
UKCA	CE EG-Konf.	Declaration of Conformity	CCC-Ex	EPD

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