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Data sheet 6AG1542-5FX10-7XE0

product type designation	**CP 1542-5**
	SIPLUS S7-1500 CP 1542-5 based on 6GK7542-5FX10-0XE0 with conformal coating, -40...+70 °C, startup -25 °C communications processor for for connection of S7-1500 to PROFIBUS DP, DP-V1 master or DP slave, S7- and PG/OP communication, time synchronization, diagnostics, reduced quantity structure
product brand name	SIPLUS
Technical Product Detail Page	https://i.siemens.com/1P6AG1542-5FX10-7XE0
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	-40 ... +40 °C
● for horizontally arranged busbars / during operation	-40 ... +70 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax - 20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
relative humidity	
● with condensation / according to IEC 60068-2-38 / maximum	100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation
chemical resistance / to commercially available cooling lubricants	Yes; incl. airborne diesel and oil droplets
resistance to biologically active substances	
● conformity according to EN 60721-3-3	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request
● conformity according to EN 60721-3-6	Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)
resistance to chemically active substances	
● conformity according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray in accordance with EN 60068-2-52 (Severity 3). The supplied plug covers must remain in place on the unused interfaces during operation.
● conformity according to EN 60721-3-6	Yes
resistance to mechanically active substances	
● conformity according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
● conformity according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
coating / for equipped printed circuit board / according to EN 61086	Yes; Class 2 for high availability

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type of coating / protection against pollution according to EN 60664-3	Yes; Protection of the type 1
type of test / of the coating / according to MIL-I-46058C	Yes; Coating discoloration during service life possible
product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, class A
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
● note	depending on CPU type
performance data / PROFIBUS DP	
service / as DP master	
● DPV1	Yes
number of DP devices	
● 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 device	244 byte
● of the address range of the outputs / per DP device	244 byte
service / as DP device	
● DPV0	Yes
● DPV1	Yes
data volume	
● of the address range of the inputs / as DP device / total	240 byte
● of the address range of the outputs / as DP device / 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 / 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

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● after end of life	0.35 kg

further information / internet links

internet link	
● to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● 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://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, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Approvals / Certificates

General Product Approval

Manufacturer Declaration | EG-Konf. | UKCA | UL | RCM | China RoHS

General Product Approval		For use in hazardous locations		Environment
EG-Konf.	UKCA	Manufacturer Declaration	ATEX	IECEx	EPD

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