SIEMENS

Data sheet

6GK7542-5FX00-0XE0

Product type designation



CP 1542-5

COMMUNICATION PROCESSOR CP 1542-5 FOR CONNECTING SIMATIC S7-1500 TO PROFIBUS DP DPV1-MASTER OR DP-SLAVE, S7-AND PG/OP COMMUNICATION, CLOCK SYNCHRONISATION DIAGNOSTICS, LESS DATA

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 / for DC		
● at 15 V	3 %	
Consumed current		
• from backplane bus / for DC / at 15 V / typical	0.1 A	
Active power loss	1.5 W	
Permitted ambient conditions		
Ambient temperature		

0 ... 40 °C

0 ... 60 °C

-40 ... +70 °C

operation

• during storage

• for vertical installation / during operation

• for horizontally arranged busbars / during

-40 +70 °C
95 %
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 • Note 8 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 / S/ communication	
Number of possible connections / for S7	
communication	
• maximum	16
• Note	depending on the system upper limit

Number of active connections / with multi-protocol mode	16
mode	
Performance data / telecontrol	
Protocol / is supported	
• TCP/IP	No
Product functions / management, configuration	
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	Yes
designation	
roduct functions / Diagnosis	
Product function / Web-based diagnostics	Yes; yes, via S7-1500 CPU
Product functions / Time	
Product function / pass on time synchronization	Yes
urther 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/automation/net/catalog
• 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

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