SIEMENS

Data sheet

6GK7542-5DX00-0XE0

Product type designation	CM 1542-5
	COMMUNICATION MODULE CM 1542-5 FOR CONNECTING S7-1500 TO PROFIBUS DP, DPV1-MASTER OR DP-SLAVE: S7- AND PG/OP- COMMUNICATION, DATA-RECORD ROUTING, CLOCK SYNCHRONISATION, DIAGNOSTICS

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 / 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

Permitted ambient conditions

Ambient temperature	
• for vertical installation / during operation	0 ... 40 °C
• for horizontally arranged busbars / during operation	0 ... 60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP20

Design, dimensions and weight

Module format	Compact module S7-1500 single width
Width	35 mm
Height	142 mm
Depth	129 mm
Net weight	0.4 kg
Mounting type	
• S7-1500 rail mounting	Yes

Product properties, functions, components / general

Number of units	
• per CPU / maximum	8
• Note	depending on CPU type

Performance data / open communication

Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	30
Amount of data	
• as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum	240 byte

Performance data / PROFIBUS DP

Service / as DP master	
• DPV1	Yes
Number of DP slaves / on DP master / usable	125
Amount of data	
• of the address area of the inputs / as DP master / total	8192 byte
• of the address area of the outputs / as DP master / total	8192 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 / S7 communication

Number of possible connections / for S7 communication	
• maximum	48
• Note	depending on the system upper limit

Performance data / multi-protocol mode

Number of active connections / with multi-protocol mode	48

Performance data / telecontrol

Protocol / is supported	
• TCP/IP	No
Configuration software	
• required	STEP 7 Professional V12 (TIA Portal) or higher
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

Product functions / Diagnosis

Product function / Web-based diagnostics	Yes; yes, via S7-1500 CPU

Product functions / Time

Product function / pass on time synchronization	Yes

Further 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/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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