

Product type designation

CM 1542-5

Communication module CM 1542-5 for connection of S7-1500 to PROFIBUS DP, DPV1 master or DP slave, S7 and PG/OP communication, data record routing, time-of-day synchronization, 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

Ambient temperature	
• for vertical installation / during operation • for horizontally arranged busbars / during operation • during storage • during transport	0 ... 40 °C 0 ... 60 °C -40 ... +70 °C -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 • Note	8 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 • of the address area of the outputs / as DP master / total • of the address area of the inputs / per DP slave • of the address area of the outputs / per DP slave	8192 byte 8192 byte 244 byte 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
Product functions / management, configuration	
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

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