

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



Transfer 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 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 weights

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 features, product functions, product 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

<ul style="list-style-type: none"> • of the address area of the outputs / per DP slave 	244 byte
Service / as DP slave	
<ul style="list-style-type: none"> • DPV0 	Yes
<ul style="list-style-type: none"> • DPV1 	Yes
Amount of data	
<ul style="list-style-type: none"> • of the address area of the inputs / as DP slave / total 	240 byte
<ul style="list-style-type: none"> • of the address area of the outputs / as DP slave / total 	240 byte

Performance data / S7 communication

Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> • maximum 	48; depending on the system upper limit

Performance data / multi-protocol mode

Number of active connections / with multi-protocol mode	48
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Performance data / telecontrol

Protocol / is supported	
<ul style="list-style-type: none"> • TCP/IP 	No

Product functions / management, configuration, engineering

Configuration software	
<ul style="list-style-type: none"> • required 	STEP 7 Professional V12 (TIA Portal) or higher
Identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> • I&M1 – higher-level designation/location designation 	Yes

Product functions / Diagnostics

Product function / Web-based diagnostics	Yes; via S7-1500 CPU
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Product functions / time

Product function / pass on time synchronization	Yes
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Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax

Security information

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>. (V3.4)

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