

Product-type designation **CM 1542-5**

COMMUNICATION MODULE CM 1542-5 FOR CONNECTING S7-1500 TO PROFIBUS DP AS DP-MASTER OR DP-SLAVE: S7- AND PG/OP-COMMUNICATION, CLOCK SYNCHRONISATION, DIAGNOSIS



Transmission rate

Transfer rate	
<ul style="list-style-type: none"> at interface 1 / in accordance with PROFIBUS 	9.6 kbit/s ... 12 Mbit/s

Interfaces

Number of interfaces / according to Industrial Ethernet	0
Number of electrical connections	
<ul style="list-style-type: none"> at interface 1 / in accordance with PROFIBUS 	1
Design of the electrical connection	
<ul style="list-style-type: none"> at interface 1 / in accordance with PROFIBUS 	9-pin Sub-D socket (RS485)

Supply voltage, current consumption, power loss

Type of / supply voltage	DC
Supply voltage / 1 / from backplane bus	15 V
Relative symmetrical tolerance / at 24 V	
<ul style="list-style-type: none"> with DC 	3 %
Consumed current	
<ul style="list-style-type: none"> from backplane bus / at 24 V with DC / typical 	0.2 A
Resistive loss	3 W

Permitted ambient conditions

Ambient temperature	
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<ul style="list-style-type: none"> • for vertical installation / during operating phase 	0 ... 40 °C
<ul style="list-style-type: none"> • for horizontal installation / during operating phase 	0 ... 60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operating / 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	
<ul style="list-style-type: none"> • S7-1500 rail mounting 	Yes
Product properties, functions, components / general	
Number of modules	
<ul style="list-style-type: none"> • per CPU / maximum 	8
<ul style="list-style-type: none"> • note 	depending on CPU type
Performance data / PROFIBUS DP	
Service / as DP master	
<ul style="list-style-type: none"> • DPV1 	Yes
Number of DP slaves / on DP master / usable	125
Amount of data	
<ul style="list-style-type: none"> • of the address area of the inputs / as DP master / overall 	8192 byte
<ul style="list-style-type: none"> • of the address area of the outputs / as DP master / overall 	8192 byte
<ul style="list-style-type: none"> • 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 / overall 	240 byte
<ul style="list-style-type: none"> • of the address area of the outputs / as DP slave / overall 	240 byte
Performance data / S7 communication	
Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> • maximum 	40
Number of possible connections / for S7 communication / with OP connections / maximum	
<ul style="list-style-type: none"> • note 	depending on the system upper limit

Performance data / multi-protocol mode	
Number of active connections / with multiprotocol mode	40
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
• note	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: 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	http://support.automation.siemens.com
letzte Änderung:	Sep 12, 2014