SIEMENS

Data sheet

6GK7542-5DX00-0XE0

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 vertical installation / during operation • for for horizontally arranged busbars / during operation • during storage • during transport • during transport Relative humidity / at 25 °C / without condensation / during operation / maximum Protection class IP IP20 Design, dimensions and weight Module format Compact module S7-1500 single width	Permitted ambient conditions	
• for vertical installation / during operation • for horizontally arranged busbars / during operation • during storage • during transport • during operation / maximum 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 Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable Amount of DP slaves / on DP master / usable 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 outputs / as DP master / total		
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• during transport Relative humidity / at 25 °C / without condensation / during operation / maximum Protection class IP Design, dimensions and weight Module format Compact module S7-1500 single width Width 35 mm Height 142 mm Depth 129 mm Net weight Mounting type • \$7-1500 rail mounting Yes Product properties, functions, components / general Number of units • per CPU / maximum • Note Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable 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 outputs / as DP master / total		
Relative humidity / at 25 °C / without condensation / during operation / maximum Protection class IP Design, dimensions and weight Module format Width Height Depth 129 mm Net weight Mounting type • \$7-1500 rail mounting Product properties, functions, components / general Number of units • per CPU / maximum • Note Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable 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 outputs / as DP master / total	during storage	-40 +70 °C
Design, dimensions and weight Module format Width Beight Be	during transport	-40 +70 °C
Protection class IP Design, dimensions and weight Module format Compact module S7-1500 single width Width 35 mm Height 142 mm Depth 129 mm Net weight Mounting type S7-1500 rail mounting Yes Product properties, functions, components / general Number of units per CPU / maximum Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data a suser data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master DPV1 Number of DP slaves / on DP master / usable 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	Relative humidity / at 25 °C / without condensation /	95 %
Design, dimensions and weight Module format Width 35 mm Height 142 mm Depth 129 mm Net weight Mounting type • S7-1500 rail mounting Yes Product properties, functions, components / general Number of units • per CPU / maximum • Note Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable • of the address area of the inputs / as DP master / total • of the address area of the outputs / as DP master / total	during operation / maximum	
Module format Width 35 mm Height Depth 129 mm Net weight Mounting type • S7-1500 rail mounting Yes Product properties, functions, components / general Number of units • per CPU / maximum • Note Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable • of the address area of the outputs / as DP master / total • of the address area of the outputs / as DP master / total • of the address area of the outputs / as DP master / total	Protection class IP	IP20
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 Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 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 outputs / as DP master / total	Design, dimensions and weight	
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Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable 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 outputs / as DP master / total	. N. (
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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 outputs / as DP master / total	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open	30
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	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE	30
Number of DP slaves / on DP master / usable 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 outputs / as DP master / total address area of the outputs / as DP master / total address area of the outputs / as DP master / total	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE	30
Number of DP slaves / on DP master / usable 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 125 8192 byte 8192 byte	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP	30
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 8192 byte 8192 byte	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP	30 240 byte
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master / total • of the address area of the outputs / as DP master / total 8192 byte	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable	30 240 byte Yes
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• of the address area of the inputs / per DP slave 244 byte	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable Amount of data • of the address area of the inputs / as DP	30 240 byte Yes 125
	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable Amount of data • of the address area of the inputs / as DP master / total • of the address area of the outputs / as DP	30 240 byte Yes 125 8192 byte
• of the address area of the outputs / per DP 244 byte slave	Performance data / open communication Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum Amount of data • as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum Performance data / PROFIBUS DP Service / as DP master • DPV1 Number of DP slaves / on DP master / usable 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	30 240 byte Yes 125 8192 byte 8192 byte

Service / as DP slave	
• DPV0	Yes
• DPV1	Yes
Amount of data	
• of the address area of the inputs / as DP slave /	240 byte
total	
of the address area of the outputs / as DP slave	240 byte
/ total	
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	48
mode	
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 	Yes
designation	
Product functions / Diagnosis	
Product function / Web-based diagnostics	Yes; yes, via S7-1500 CPU
Product functions / Time	
Product function / pass on time synchronization	Yes
Accessories	
Further Information / Internet Links	
Internet-Link	
to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
SELECTION TOOL	http://www.ciomono.com/cimetic.not
• 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 https://support.industry.siemens.com
 to website: Industry Online Support 	

Security information

Security information

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