SIEMENS

Data sheet

Product type designation

6GK7542-5DX00-0XE0

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 	0 60 °C
operation	
• during storage	-40 +70 °C
 during transport 	-40 +70 °C
Relative humidity	
 at 25 °C / without condensation / during 	95 %
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 features, product functions, product compo	nents / general
Number of units	
 per CPU / maximum 	8
Note	depending on CPU type
Performance data / open communication	
Number of possible connections / for open	30
communication / by means of SEND/RECEIVE	
blocks / maximum	
Amount of data	
 as user data per connection / for open communication / by means of SEND/RECEIVE 	240 byte
blocks / maximum	
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; 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
Product functions / management, configuration, eng Configuration software	gineering
• 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 / Diagnostics	
Product function / Web-based diagnostics	Yes; via S7-1500 CPU
Product function / Web-based diagnostics Product functions / time	Yes; via S7-1500 CPU
-	Yes; via S7-1500 CPU Yes
Product functions / time Product function / pass on time synchronization Further information / Internet-Links	
Product functions / time Product function / pass on time synchronization Further information / Internet-Links Internet-Link	Yes
Product functions / time Product function / pass on time synchronization Further information / Internet-Links	
Product functions / time Product function / pass on time synchronization Further information / Internet-Links Internet-Link • to website: Selector SIMATIC NET	Yes
Product functions / time Product function / pass on time synchronization Further information / Internet-Links Internet-Link • to website: Selector SIMATIC NET SELECTION TOOL	Yes <u>http://www.siemens.com/snst</u>
Product functions / time Product function / pass on time synchronization Further information / Internet-Links Internet-Link • to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication	Yes http://www.siemens.com/snst http://www.siemens.com/simatic-net
Product functions / time Product function / pass on time synchronization Further information / Internet-Links Internet-Link • to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall	Yes http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com
Product functions / time Product function / pass on time synchronization Further information / Internet-Links Internet-Link • to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center	Yes http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter

• to website: Industry Online Support

https://support.industry.siemens.com

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. Thirdparty 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) 03/05/2020 last modified: