

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	
<ul style="list-style-type: none"> <li>at the 1st interface / acc. to PROFIBUS</li> </ul>	9.6 kbit/s ... 12 Mbit/s
interfaces	
number of interfaces / acc. to Industrial Ethernet	0
number of electrical connections	
<ul style="list-style-type: none"> <li>at the 1st interface / acc. to PROFIBUS</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / acc. to PROFIBUS</li> </ul>	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	
<ul style="list-style-type: none"> <li>at 15 V</li> </ul>	3 %
consumed current	
<ul style="list-style-type: none"> <li>from backplane bus / at DC / at 15 V / typical</li> </ul>	0.2 A
power loss [W]	3 W
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> <li>for vertical installation / during operation</li> </ul>	0 ... 40 °C
<ul style="list-style-type: none"> <li>for horizontally arranged busbars / during operation</li> </ul>	0 ... 60 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-40 ... +70 °C
relative humidity	
<ul style="list-style-type: none"> <li>at 25 °C / without condensation / during operation / maximum</li> </ul>	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
fastening method	
<ul style="list-style-type: none"> <li>S7-1500 rail mounting</li> </ul>	Yes
product features, product functions, product components / general	
number of units	

<ul style="list-style-type: none"> <li>per CPU / maximum</li> <li>note</li> </ul>	8 depending on CPU type
<b>performance data / open communication</b>	
number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	30
data volume	
<ul style="list-style-type: none"> <li>as user data per connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>	240 byte
<b>performance data / PROFIBUS DP</b>	
service / as DP master	
<ul style="list-style-type: none"> <li>DPV1</li> </ul>	Yes
number of DP slaves	
<ul style="list-style-type: none"> <li>on DP master / operable</li> </ul>	125
data volume	
<ul style="list-style-type: none"> <li>of the address range of the inputs / as DP master / total</li> </ul>	8192 byte
<ul style="list-style-type: none"> <li>of the address range of the outputs / as DP master / total</li> </ul>	8192 byte
<ul style="list-style-type: none"> <li>of the address range of the inputs / per DP slave</li> </ul>	244 byte
<ul style="list-style-type: none"> <li>of the address range of the outputs / per DP slave</li> </ul>	244 byte
service / as DP slave	
<ul style="list-style-type: none"> <li>DPV0</li> <li>DPV1</li> </ul>	Yes Yes
data volume	
<ul style="list-style-type: none"> <li>of the address range of the inputs / as DP slave / total</li> </ul>	240 byte
<ul style="list-style-type: none"> <li>of the address range of the outputs / as DP slave / total</li> </ul>	240 byte
<b>performance data / S7 communication</b>	
number of possible connections / for S7 communication	
<ul style="list-style-type: none"> <li>maximum</li> </ul>	48; depending on the system upper limit
<b>performance data / multi-protocol mode</b>	
number of active connections / with multi-protocol mode	48
<b>performance data / telecontrol</b>	
protocol / is supported	
<ul style="list-style-type: none"> <li>TCP/IP</li> </ul>	No
<b>product functions / management, configuration, engineering</b>	
configuration software	
<ul style="list-style-type: none"> <li>required</li> </ul>	STEP 7 Professional V12 (TIA Portal) or higher
identification & maintenance function	
<ul style="list-style-type: none"> <li>I&amp;M0 - device-specific information</li> <li>I&amp;M1 – higher level designation/location designation</li> </ul>	Yes Yes
<b>product functions / diagnostics</b>	
product function / web-based diagnostics	Yes; via S7-1500 CPU
<b>product functions / time</b>	
product function / pass on time synchronization	Yes
<b>standards, specifications, approvals / hazardous environments</b>	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> <li>to website: Industrial communication</li> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

## 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)

last modified:

1/24/2021 