

### product type designation



### CM 1542-5

communications module CM 1542-5 for connection of S7-1500 to PROFIBUS DP, DP-V1 master or DP Device, 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 / according to PROFIBUS</li> </ul>	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"> <li>at the 1st interface / according to PROFIBUS</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / according 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> <li>for horizontally arranged busbars / during operation</li> <li>during storage</li> <li>during transport</li> <li>note</li> </ul>	-30 ... +40 °C -30 ... +60 °C -40 ... +70 °C -40 ... +70 °C without condensation or icing
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	restrictions for installation altitudes > 2 000 m, see manual
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	8
<ul style="list-style-type: none"> <li>per CPU / maximum</li> </ul>	8
<ul style="list-style-type: none"> <li>note</li> </ul>	depending on CPU type

**performance data / open communication**

number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	30
data volume	240 byte
<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

**performance data / PROFIBUS DP**

service / as DP master	Yes
<ul style="list-style-type: none"> <li>DPV1</li> </ul>	Yes
number of DP slaves	125
<ul style="list-style-type: none"> <li>on DP master / operable</li> </ul>	125
data volume	8192 byte
<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	Yes
<ul style="list-style-type: none"> <li>DPV0</li> </ul>	Yes
<ul style="list-style-type: none"> <li>DPV1</li> </ul>	Yes
data volume	240 byte
<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

**performance data / S7 communication**

number of possible connections / for S7 communication	48; depending on the system upper limit
<ul style="list-style-type: none"> <li>maximum</li> </ul>	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	No
<ul style="list-style-type: none"> <li>TCP/IP</li> </ul>	No

**product functions / management, configuration, engineering**

configuration software	STEP 7 Professional V18 (TIA Portal) or higher
<ul style="list-style-type: none"> <li>required</li> </ul>	STEP 7 Professional V18 (TIA Portal) or higher
identification & maintenance function	Yes
<ul style="list-style-type: none"> <li>I&amp;M0 - device-specific information</li> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M1 - higher level designation/location designation</li> </ul>	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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**standards, specifications, approvals**

reference code	KEC
<ul style="list-style-type: none"> <li>according to IEC 81346-2:2019</li> </ul>	KEC

**standards, specifications, approvals / Environmental Product Declaration**

Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	115.52 kg
<ul style="list-style-type: none"> <li>total</li> </ul>	115.52 kg
<ul style="list-style-type: none"> <li>during manufacturing</li> </ul>	21.24 kg
<ul style="list-style-type: none"> <li>during operation</li> </ul>	93.93 kg
<ul style="list-style-type: none"> <li>after end of life</li> </ul>	0.35 kg

**further information / internet links**




internet link	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a> <a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a> <a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a> <a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a> <a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>to website: Industrial communication</li> </ul>	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>to website: CAX-Download-Manager</li> </ul>	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>

**security information**

security information

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**Approvals / Certificates**

General Product Approval	For use in hazardous locations	Environment
		<p><a href="#">Declaration of Conformity</a></p>
		<p><a href="#">CCC-Ex</a></p> 

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