

### product type designation

### SIPLUS S7-1200 CM 1243-5 RAIL

SIPLUS S7-1200 CM 1243-5 T1 RAIL -25 ... +55°C T1 with 70°C for 10 min with conformal coating based on 6GK7243-5DX30-0XE0 .

Communication module CM 1243-5 for connecting S7-1200 to PROFIBUS as DP master module



Figure similar

### 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
- for power supply 1

#### type of electrical connection

- at the 1st interface / acc. to PROFIBUS 9-pin Sub-D socket (RS485)
- for power supply 3-pole terminal block

### supply voltage, current consumption, power loss

#### type of voltage / of the supply voltage

DC

#### supply voltage / external

24 V

#### supply voltage / external / at DC / rated value

24 V

#### relative positive tolerance / at DC / at 24 V

20 %

relative negative tolerance / at DC / at 24 V	20 %
consumed current <ul style="list-style-type: none"> <li>• from external supply voltage / at DC / at 24 V / typical</li> </ul>	0.1 A
power loss [W]	2.4 W
<b>ambient conditions</b>	
ambient temperature <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-25 ... +55 °C -40 ... +70 °C -40 ... +70 °C
installation altitude / at height above sea level / maximum	2000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
relative humidity <ul style="list-style-type: none"> <li>• with condensation / acc. to IEC 60068-2-38 / maximum</li> </ul>	100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation
chemical resistance / to commercially available cooling lubricants	Yes; incl. airborne diesel and oil droplets
resistance to biologically active substances <ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> <li>• conformity acc. to EN 60721-3-5</li> </ul>	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request Yes; Class 5B2 mold and fungal spores (excluding fauna), Class 5B3 on request
resistance to chemically active substances <ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> <li>• conformity acc. to EN 60721-3-5</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray in accordance with EN 60068-2-52 (Severity 3). The supplied plug covers must remain in place on the unused interfaces during operation. Yes; Class 5C3 (RH < 75 %) incl. salt spray in accordance with EN 50155 (ST2). The supplied plug covers must remain in place over the unused interfaces during operation.
resistance to mechanically active substances <ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> <li>• conformity acc. to EN 60721-3-5</li> </ul>	Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation. Yes; Class 5S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
coating / for equipped printed circuit board / acc. to EN 61086	Yes; Class 2 for high availability
type of coating / protection against pollution according to EN 60664-3	Yes; Protection of the type 1
type of coating / for electronic devices in railway applications acc. to EN 50155	Yes; Protective coating of the Class PC2 according to EN 50155:2018
type of test / of the coating / acc. to MIL-I-46058C	Yes; Coating discoloration during service life possible

product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A	Yes; Conformal coating, class A
protection class IP	IP20

#### design, dimensions and weights

module format	Compact module S7-1200 single width
width	30 mm
height	100 mm
depth	75 mm
net weight	0.134 kg
mounting type	
• 35 mm DIN rail mounting	Yes
• S7-300 rail mounting	No
• wall mounting	Yes

#### product features, product functions, product components / general

number of units	
• per CPU / maximum	1

#### performance data / PROFIBUS DP

service / as DP master	
• DPV1	Yes
number of DP slaves	
• on DP master / usable	16
amount of data	
• of the address area of the inputs / as DP master / total	512 byte
• of the address area of the outputs / as DP master / total	512 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
• of the address area of the diagnostic data / per DP slave	240 byte
service / as DP slave	
• DPV0	No
• DPV1	No

#### performance data / S7 communication

number of possible connections / for S7 communication	
• maximum	8; max. 4 connections to other S7 stations
• with PG connections / maximum	1
• with PG/OP connections / maximum	3

#### performance data / multi-protocol mode

number of active connections / with multi-protocol mode

- without DP / maximum
- with DP / maximum

8  
8

#### performance data / telecontrol

protocol / is supported

- TCP/IP

No

#### product functions / management, configuration, engineering

configuration software

- required

#NO\_DATA

#### standards, specifications, approvals

certificate of suitability / fire protection in accordance with EN 45545-2

Yes; Railway vehicles - Documentation on request

#### railway application

certificate of suitability / railway application in accordance with EN 50121-3-2

Yes; EMC for railway vehicles

certificate of suitability / railway application in accordance with EN 50121-4

Yes; EMC for signal and telecommunication equipment

certificate of suitability / railway application in accordance with EN 50124-1

Yes; Railway applications - Overvoltage category OV2 pollution degree PD2 rated impulse voltage  $UN_i = 0.5 \text{ kVUNm} = \text{DC } 24$

certificate of suitability / railway application in accordance with EN 50125-1

Yes; Railway vehicles - See ambient conditions

certificate of suitability / railway application in accordance with EN 50125-2

Yes; Fixed-electrical installations - see ambient conditions

certificate of suitability / railway application in accordance with EN 50125-3

Yes; Signal and telecommunications equipment - see Ambient conditions vibrations and shocks: Application point outside the rails (distance 1 m to 3 m from rail)

certificate of suitability / railway application in accordance with EN 50155

Yes; Railway vehicles - temperature class T1, horizontal mounting position, salt spray class ST3

certificate of suitability / railway application in accordance with EN 61373

Yes; Railway vehicles - Vibrations and shocks Category 1 Class A/B

#### further information / internet-Links

Internet-Link

- to website: Selector TIA Selection Tool
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>  
<http://www.siemens.com/simatic-net>  
<https://mall.industry.siemens.com>  
<http://www.siemens.com/industry/infocenter>  
<http://automation.siemens.com/bilddb>  
<http://www.siemens.com/cax>  
<https://support.industry.siemens.com>

#### 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:**

10/05/2020