



Figure similar

SIMATIC S7-1200, Communication module CM 1241, RS422/485, 9-pole D-sub (socket) supports Freeport

General information	
Product type designation	CM 1241 RS 422 / 485
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption, max.	220 mA; From backplane bus 5 V DC
Power loss	
Power loss, typ.	1.1 W
Interfaces	
Interfaces/bus type	RS 422 / 485 (X.27)
Number of interfaces	1
Point-to-point connection	
• Cable length, max.	1 000 m
Integrated protocol driver	
— Freeport	Yes
— ASCII	Yes; Available as library function
— Modbus RTU master	Yes
— Modbus RTU device	Yes
— USS	Yes; Available as library function
Protocols	
Integrated protocols	
Freeport	
— Telegram length, max.	1 kbyte
— Bits per character	7 or 8
— Number of stop bits	1 (Standard), 2
— Parity	No parity (standard); even, uneven, mark (parity bit always 1); space (parity bit always 0)
3964 (R)	
— Telegram length, max.	1 kbyte
— Bits per character	7 or 8
— Number of stop bits	1 (Standard), 2
— Parity	No parity (standard); even, uneven, mark (parity bit always 1); space (parity bit always 0)
Modbus RTU master	
— Address area	1 through 49 999 (Standard Modbus addressing)
— max. number of devices	247; slave numbers 1 through 247, per MODBUS network segment maximum 32 devices, additional repeaters needed to expand the network to maximum configuration

protocols / Modbus RTU device / header		
— Address area	1 through 49 999 (Standard Modbus addressing)	
<b>Interrupts/diagnostics/status information</b>		
Diagnostics function	Yes	
Diagnostics indication LED		
• for status of the outputs	Yes	
<b>Degree and class of protection</b>		
IP degree of protection	IP20	
<b>Standards, approvals, certificates</b>		
CE mark	Yes	
CSA approval	Yes	
UL approval	Yes	
cULus	Yes	
FM approval	Yes	
RCM (formerly C-TICK)	Yes	
KC approval	Yes	
Marine approval	Yes	
<b>Ambient conditions</b>		
Free fall		
• Fall height, max.	0.3 m; five times, in product package	
Ambient temperature during operation		
• min.	-20 °C	
• max.	60 °C	
• horizontal installation, min.	-20 °C	
• horizontal installation, max.	60 °C	
• vertical installation, min.	-20 °C	
• vertical installation, max.	50 °C	
• permissible temperature change	5°C to 55°C, 3°C / minute	
Ambient temperature during storage/transportation		
• min.	-40 °C	
• max.	70 °C	
Air pressure acc. to IEC 60068-2-13		
• Operation, min.	795 hPa	
• Operation, max.	1 080 hPa	
• Storage/transport, min.	660 hPa	
• Storage/transport, max.	1 080 hPa	
Relative humidity		
• Operation at 25 °C without condensation, max.	95 %	
<b>Dimensions</b>		
Width	30 mm	
Height	100 mm	
Depth	75 mm	
<b>Weights</b>		
Weight, approx.	155 g	
<b>Classifications</b>		
	<b>Version</b>	<b>Classification</b>
eClass	14	27-24-22-08
eClass	12	27-24-22-08
eClass	9.1	27-24-22-08
eClass	9	27-24-22-08
eClass	8	27-24-22-08
eClass	7.1	27-24-22-08
eClass	6	27-24-22-08
ETIM	9	EC001423
ETIM	8	EC001423
ETIM	7	EC001423
IDEA	4	3564

## Approvals / Certificates

## General Product Approval



[Manufacturer Declaration](#)



[Metrological Approval](#)

[KC](#)

## General Product Approval

## For use in hazardous locations



[FM](#)

[CCC-Ex](#)



## For use in hazardous locations

## Marine / Shipping

[Miscellaneous](#)



[NK / Nippon Kaiji Kyokai](#)

## Marine / Shipping



[CCS \(China Classification Society\)](#)



last modified:

12/8/2024