



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

Figure similar

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)

<b>Modbus RTU master</b>			
— 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		
<b>Modbus RTU device</b>			
— Address area	1 through 49 999 (Standard Modbus addressing)		
<b>Interrupts/diagnostics/status information</b>			
Diagnostics function	Yes		
<b>Diagnostics indication LED</b>			
• 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>			
<b>Free fall</b>			
• Fall height, max.	0.3 m; five times, in product package		
<b>Ambient temperature during operation</b>			
• 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		
<b>Ambient temperature during storage/transportation</b>			
• min.	-40 °C		
• max.	70 °C		
<b>Air pressure acc. to IEC 60068-2-13</b>			
• Operation, min.	795 hPa		
• Operation, max.	1 080 hPa		
• Storage/transport, min.	660 hPa		
• Storage/transport, max.	1 080 hPa		
<b>Relative humidity</b>			
• 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	10	EC001423
ETIM	9	EC001423
ETIM	8	EC001423
ETIM	7	EC001423
IDEA	4	3564
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

**General Product Approval**

[Manufacturer Declaration](#)



[Miscellaneous](#)



[Metrological Approval](#)

**General Product Approval**



[China RoHS](#)



**For use in hazardous locations**



[FM](#)

[CCC-Ex](#)



[Type Examination Certificate](#)



IECEX

**For use in hazardous locations      Maritime application**

[Miscellaneous](#)

[CCC-Ex](#)



ABS



BUREAU VERITAS



DNV



LRS

**Maritime application      Environment**

[NK / Nippon Kaiji Kyokai](#)



RINA



RMRS

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

[KR \(Korean Register of Shipping\)](#)



EPD

**Environment**



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