



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)		
Interrupts/diagnostics/status information			
Diagnostics function	Yes		
Diagnostics indication LED			
• for status of the outputs	Yes		
Degree and class of protection			
IP degree of protection	IP20		
Standards, approvals, certificates			
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		
Ambient conditions			
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 %		
Dimensions			
Width	30 mm		
Height	100 mm		
Depth	75 mm		
Weights			
Weight, approx.	155 g		
Classifications			
		Version	Classification
	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

		UNSPSC	15	32-15-17-05
Approvals / Certificates				
General Product Approval				EMV
 EG-Konf.		 UL	KC	 RCM  RCM
EMV	For use in hazardous locations			
 RCM	 ATEX	 IECEx	FM	Type Examination Certificate  IECEx
For use in hazardous locations	Maritime application			
 ATEX		 DNV	 PRS	 RINA  RMRS
Maritime application				
CCS (China Classification Society)				