

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)	Yes
• 24 V DC	
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	
Number of interfaces	1
Interface (physical) RS 422/485 (X.27)	Yes
Point-to-point connection	
• Cable length, max.	1 000 m
Integrated protocol driver	

— Freeport	Yes
— ASCII	Yes; Available as library function
— Modbus	Yes
— Modbus RTU master	Yes
— MODBUS RTU slave	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)

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Modbus RTU master

— Address area	1 through 49 999 (Standard Modbus addressing)
— Number of slaves, max.	247; slave numbers 1 through 247, per MODBUS network segment maximum 32 devices, additional repeaters needed to expand the network to maximum configuration

MODBUS RTU slave

— Address area	1 through 49 999 (Standard Modbus addressing)
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Interrupts/diagnostics/status information

Diagnostics function	Yes
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Diagnostics indication LED

• for status of the outputs	Yes
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Degree and class of protection

Degree of protection acc. to EN 60529

• IP20	Yes
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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
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last modified: 12/10/2019