

SIMATIC S7-1200, Communication module CM 1241, RS232, 9-pole D-sub (pin), supports Freeport



General information

Product type designation	CM 1241 RS 232
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Supply voltage

Rated value (DC)	Yes
<ul style="list-style-type: none"> • 24 V DC 	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V

Input current

Current consumption, max.	200 mA; From backplane bus 5 V DC
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Power loss

Power loss, typ.	1.1 W
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Interfaces

Number of interfaces	1
Interface physics, RS 232C (V.24)	Yes

Point-to-point connection

<ul style="list-style-type: none"> • Cable length, max. 	10 m
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Integrated protocol driver

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

Protocols

Integrated protocols	
Freepoint	
— 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)
— 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)

Interrupts/diagnostics/status information

Diagnostics function	Yes
Diagnostics indication LED	
• for status of the outputs	Yes

Degree and class of protection

Degree of protection acc. to EN 60529	
• IP20	Yes

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
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Ambient conditions

Free fall

• Fall height, max.	0.3 m; five times, in product package
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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 %
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Dimensions

Width	30 mm
Height	100 mm
Depth	75 mm

Weights

Weight, approx.	150 g
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last modified: 08/27/2019