



SIMATIC S7-1200 G2: CB 1241 Communication Board, interface: RS485, with push-in terminal block

General information

Product type designation	CB 1241 RS 485
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Input current

from backplane bus 5 V DC, typ.	75 mA
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Power loss

Power loss, typ.	0.4 W
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Interfaces

Interfaces/bus type	RS 485
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Number of interfaces	1
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Point-to-point connection

• Cable length, max.	1 000 m
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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

Interface types

RS 485

• Transmission rate, max.	250 kbit/s
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Protocols

Integrated protocols

Freeport

— Telegram length, max.	4 kbyte
— Bits per character	7 or 8
— Number of stop bits	1 (Standard), 2
— Parity	no parity (standard); even, odd, mark (parity bit always 1); space (parity bit always 0)

Modbus RTU master

— Address area	1 through 65535 (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

Modbus RTU device

— Address area	1 through 65535 (Standard Modbus addressing)
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Interrupts/diagnostics/status information

Diagnostics function	Yes
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Diagnostics indication LED

• DIAG LED	Yes
• for status of the outputs	Yes

Degree and class of protection			
IP degree of protection		IP20	
Standards, approvals, certificates			
CE mark		Yes	
CSA approval		No	
UL approval		Yes	
cULus		Yes	
FM approval		No	
RCM (formerly C-TICK)		Yes	
KC approval		Yes	
Marine approval		No	
Ambient conditions			
Free fall			
• Fall height, max.		0.3 m; five times, in product package	
Ambient temperature during operation			
• horizontal installation, min.		-20 °C	
• horizontal installation, max.		60 °C; at max. voltages and max. specification	
• vertical installation, min.		-20 °C	
• vertical installation, max.		50 °C; at max. voltages and max. specification	
Ambient temperature during storage/transportation			
• min.		-40 °C	
• max.		70 °C	
Air pressure acc. to IEC 60068-2-13			
• Operation, min.		540 hPa	
• Operation, max.		1 140 hPa	
• Storage/transport, min.		540 hPa	
• Storage/transport, max.		1 140 hPa	
Altitude during operation relating to sea level			
• Installation altitude, min.		-1 000 m	
• Installation altitude, max.		5 000 m; Restrictions for installation altitudes > 2 000 m, see manual	
Relative humidity			
• Operation, max.		95 %; no condensation	
Vibrations			
• Vibration resistance during operation acc. to IEC 60068-2-6		3.5 mm from 5 - 8.4 Hz, 1g from 8.4 - 150 Hz	
• Operation, tested according to IEC 60068-2-6		Yes	
Shock testing			
• tested according to IEC 60068-2-27		Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms	
Pollutant concentrations			
• SO2 at RH < 60% without condensation		SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60 % condensation-free	
Mechanics/material			
Enclosure material (front)			
• plastic		Yes	
Dimensions			
Width		15 mm	
Height		62 mm	
Depth		63 mm	
Weights			
Weight, approx.		29 g	
Classifications			
		Version	Classification
	eClass	16	27-24-22-08
	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



CCC

[Miscellaneous](#)

[Manufacturer Declaration](#)



UL



RCM



EAC

General Product Approval

EMV



CE
EG-Konf.



UK
CA

[China RoHS](#)

[Manufacturer Declaration](#)



KC



KC

For use in hazardous locations



UL

[CCC-Ex](#)

[CCC-Ex](#)

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