

SIPLUS S7-1500CM PtP RS422/485 -40...+70°C start up -25°C with conformal coating based on 6ES7540-1AB00-0AA0 . Communication module for Serial connection RS422, RS485 Freeport, 3964 (R), USS, 19200 Kbit/s, 15-Pin D-sub socket



Figure similar

General information	
Product type designation	CM PtP RS 422 / 485 BA
Product function	
<ul style="list-style-type: none"> • I&M data • Fast startup 	<p>Yes; I&M 0</p> <p>Yes</p>
Installation type/mounting	
Rail mounting	Yes; S7-1500 mounting rail
Supply voltage	
Type of supply voltage	system power supply
Input current	
Current consumption (rated value)	33 mA; From the backplane bus
Power	
Power available from the backplane bus	0.65 W
Power loss	
Power loss, typ.	0.6 W

Address area	
Address space per module	
• Inputs	8 byte
Interface types	
RS 485	
• Transmission rate, max.	19.2 kbit/s
• Cable length, max.	1 200 m
RS 422	
• Transmission rate, max.	19.2 kbit/s
• Cable length, max.	1 200 m
• 4-wire full duplex connection	Yes
• 4-wire multipoint connection	No
Protocols	
Integrated protocols	
Freeport	
— Telegram length, max.	1 kbyte
— Bits per character	7 or 8
— Number of stop bits	1 or 2 bit
— Parity	None, even, odd, always 1, always 0, any
3964 (R)	
— Telegram length, max.	1 kbyte
— Bits per character	7 or 8
— Number of stop bits	1 or 2 bit
— Parity	None, even, odd, always 1, always 0, any
Telegram buffer	
• Buffer memory for telegrams	2 kbyte
• Number of telegrams which can be buffered	255
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
• Hardware interrupt	No
Diagnostic messages	
• Wire-break	Yes
Diagnostics indication LED	
• RUN LED	Yes; green LED
• Receive RxD	Yes; Yellow LED
• Transmit TxD	Yes; Yellow LED
Potential separation	
between backplane bus and interface	Yes

Isolation	
Isolation tested with	500 V
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. 	<p>-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C</p> <p>70 °C</p> <p>-40 °C; = Tmin; Startup @ -25 °C</p> <p>40 °C</p>
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> Installation altitude above sea level, max. Ambient air temperature-barometric pressure-altitude 	<p>5 000 m</p> <p>Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)</p>
Relative humidity	
<ul style="list-style-type: none"> With condensation, tested in accordance with IEC 60068-2-38, max. 	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Coolants and lubricants	
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	

— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04

* The supplied plug covers must remain in place over the unused interfaces during operation!

Conformal coating

- Coatings for printed circuit board assemblies acc. to EN 61086
- Protection against fouling acc. to EN 60664-3
- Military testing according to MIL-I-46058C, Amendment 7
- Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A

Yes
 Yes; Type 1 protection
 Yes; Discoloration of coating possible during service life
 Yes; Conformal coating, Class A

Decentralized operation

to SIMATIC S7-300	Yes
to SIMATIC S7-400	Yes
to SIMATIC S7-1500	Yes
to standard PROFINET controller	Yes

Dimensions

Width	35 mm
Height	147 mm
Depth	127 mm

Weights

Weight, approx.	0.22 kg
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last modified: 05/13/2020