

SIPLUS S7-1500CM PtP RS422/485 -40...+70°C start up -25°C with conformal coating based on 6ES7541-1AB00-0AB0 . Communication module for Serial connection RS422 and RS485, Freeport, 3964 (R), USS, MODBUS RTU Master, Slave, 115200 Kbit/s, 15-Pin D-sub socket



Figure similar

General information	
Product type designation	CM PtP RS 422 / 485 HF
Product function	
<ul style="list-style-type: none"> <li>• I&amp;M data</li> <li>• Fast startup</li> </ul>	Yes; I&M 0 Yes
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.	115.2 kbit/s
• Cable length, max.	1 200 m
RS 422	
• Transmission rate, max.	115.2 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.	4 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.	4 kbyte
— Bits per character	7 or 8
— Number of stop bits	1 or 2 bit
— Parity	None, even, odd, always 1, always 0, any
Modbus RTU master	
— Address area	1 to 247, extended 1 to 65535
— Number of slaves, max.	32
MODBUS RTU slave	
— Address area	1 to 247, extended 1 to 65535
Telegram buffer	
• Buffer memory for telegrams	8 kbyte
• Number of telegrams which can be buffered	255
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
• Hardware interrupt	No
Diagnoses	
• 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
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### Isolation

Isolation tested with	500 V
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### Ambient conditions

#### Ambient temperature during operation

- |                                 |  |
|---------------------------------|--|
| • horizontal installation, min. | -40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C |
| • horizontal installation, max. | 70 °C  |
| • vertical installation, min.   | -40 °C; = Tmin; Startup @ -25 °C                             |
| • vertical installation, max.   | 40 °C  |

#### Ambient temperature during storage/transportation

- |        |        |
|--------|--------|
| • min. | -40 °C |
| • max. | 70 °C  |

#### Altitude during operation relating to sea level

- |  |   |
|--|---|
| • Installation altitude above sea level, max.          | 5 000 m   |
| • Ambient air temperature-barometric pressure-altitude | 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) |

#### Relative humidity

- |   |   |
|---|---|
| • 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; *
<b>Usage in industrial process technology</b>	
— 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)
<b>Remark</b>	
— 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!
<b>Conformal coating</b>	
<ul style="list-style-type: none"> <li>• Coatings for printed circuit board assemblies acc. to EN 61086</li> <li>• Protection against fouling acc. to EN 60664-3</li> <li>• Military testing according to MIL-I-46058C, Amendment 7</li> <li>• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	<p>Yes; Class 2 for high reliability</p> <p>Yes; Type 1 protection</p> <p>Yes; Discoloration of coating possible during service life</p> <p>Yes; Conformal coating, Class A</p>
<b>Decentralized operation</b>	
to SIMATIC S7-300	Yes
to SIMATIC S7-400	Yes
to SIMATIC S7-1500	Yes
to standard PROFINET controller	Yes
<b>Dimensions</b>	
Width	35 mm
Height	147 mm
Depth	127 mm
<b>Weights</b>	
Weight, approx.	0.22 kg
<b>last modified:</b>	10/13/2020