



Figure similar

SIPLUS S7-1500 CM PTP RS422/485 HF based on 6ES7541-1AB01-0AB0 with conformal coating, -40...+70 °C RS422/485 HF communications module for serial connection RS-422 and RS-485, Freeport, 3964(R), USS, Modbus RTU Master, device, 250000 bit/s, 15-pin D-sub socket 15-pin D-sub socket

| General information | |
|--|---|
| Product type designation | CM PtP RS 422 / 485 HF |
| based on | 6ES7541-1AB01-0AB0 |
| Product function | |
| <ul style="list-style-type: none"> I&M data Fast startup | Yes; I&M 0 Yes |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version | see entry ID: 109746275 |
| Installation type/mounting | |
| Rail mounting | Yes; S7-1500 mounting rail |
| Supply voltage | |
| Design of the power supply | system power supply |
| Input current | |
| Current consumption (rated value) | 43 mA; From the backplane bus |
| Power | |
| Power consumption from the backplane bus | 0.65 W |
| Power loss | |
| Power loss, typ. | 0.6 W |
| Address area | |
| Address space per module | |
| <ul style="list-style-type: none"> Inputs Outputs | 8 byte; performance mode: 32 byte 0 byte; performance mode: 32 byte |
| Interface types | |
| RS 485 | |
| <ul style="list-style-type: none"> Transmission rate, max. Cable length, max. | 250 kbit/s 1 200 m |
| RS 422 | |
| <ul style="list-style-type: none"> Transmission rate, max. Cable length, max. 4-wire full duplex connection 4-wire multipoint connection | 115.2 kbit/s 1 200 m Yes No |
| Protocols | |
| Integrated protocols | |
| Freeport | |
| <ul style="list-style-type: none"> Telegram length, max. Bits per character Number of stop bits Parity | 4 kbyte 7 or 8 1 or 2 bit 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 |
| — max. number of devices | 32 |
| protocols / Modbus RTU device / header | |
| — 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 |
| • ERROR LED | Yes; red LED |
| • Receive RxD | Yes; Yellow LED |
| • Transmit TxD | Yes; Yellow LED |
| Potential separation | |
| between backplane bus and interface | Yes |
| Isolation | |
| Isolation tested with | 707 V DC (type test) |
| Ambient conditions | |
| Ambient temperature during operation | |
| • horizontal installation, min. | -40 °C; = Tmin (incl. condensation/frost) |
| • horizontal installation, max. | 70 °C; = Tmax |
| • vertical installation, min. | -40 °C; = Tmin |
| • vertical installation, max. | 40 °C; = Tmax |
| Altitude during operation relating to sea level | |
| • Installation altitude above sea level, max. | 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP system manual |
| Relative humidity | |
| • With condensation, tested in accordance with IEC 60068-2-38, max. | 100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation |
| 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, fungal and dry rot spores (excluding fauna) |
| — 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) |

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| 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! |

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| Conformal coating | |
| <ul style="list-style-type: none"> • 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 | <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> |

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| Decentralized operation | |
| to SIMATIC S7-300 | Yes |
| to SIMATIC S7-400 | Yes |
| to SIMATIC S7-1500 | Yes |
| to standard PROFINET controller | Yes |

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|-------------------|--------|
| Dimensions | |
| Width | 35 mm |
| Height | 147 mm |
| Depth | 127 mm |

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| Weights | |
| Weight, approx. | 0.22 kg |

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| Classifications | | | |
| | | Version | Classification |
| | 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 | 9 | EC001423 |
| | ETIM | 8 | EC001423 |
| | ETIM | 7 | EC001423 |

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| Approvals / Certificates | |
| General Product Approval | |

[Miscellaneous](#)

[Manufacturer Declaration](#)



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