SIEMENS

## Data sheet 6ES7541-1AB00-0AB0



Figure similar

SIMATIC S7-1500, CM PTP RS422/485 HF Communication module for Serial connection RS422 and RS485, Freeport, 3964 (R), USS, MODBUS RTU Master, Slave, 115200 Kbit/s, 15-Pin D-sub socket

| | |
|---|---|
| **General information** | |
| Product type designation | CM PtP RS 422 / 485 HF |
| Product function | |
| ● I&M data | Yes; I&M 0 |
| ● Fast startup | Yes |
| Engineering with | |
| ● STEP 7 TIA Portal configurable/integrated from version | V12 / V12 |
| ● STEP 7 configurable/integrated from version | V5.5 SP2 with GSD file |
| ● PROFIBUS from GSD version/GSD revision | - / - |
| ● PROFINET from GSD version/GSD revision | V2.3 / - |
| **Installation type/mounting** | |
| Rail mounting | Yes; S7-1500 mounting rail |
| **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 | |
| ● 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) | |


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| | |
|---|---|
| — 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 |
| Modbus RTU device | |
| — 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. | 0 °C |
| ● horizontal installation, max. | 60 °C |
| ● vertical installation, min. | 0 °C |
| ● vertical installation, max. | 40 °C |
| 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 |
| **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 |

**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 |


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| | | |
|---|---|---|
| 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

Miscellaneous







Manufacturer Declaration






### General Product Approval







China RoHS

### For use in hazardous locations




FM




### For use in hazardous locations

FM

CCC-Ex







Type Examination Certificate

Miscellaneous

### For use in hazardous locations

CCC-Ex

### Maritime application













NK / Nippon Kaiji Kyokai

### Maritime application







CCS (China Classification Society)

KR (Korean Register of Shipping)

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