## SIEMENS

## Data sheet

## 6ES7541-1AB00-0AB0



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

Figure similar

| 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   |                               |
| <ul> <li>STEP 7 TIA Portal configurable/integrated from<br/>version</li> </ul> | V12 / V12                     |
| <ul> <li>STEP 7 configurable/integrated from version</li> </ul>                | V5.5 SP2 with GSD file        |
| <ul> <li>PROFIBUS from GSD version/GSD revision</li> </ul>                     | - / -                         |
| <ul> <li>PROFINET from GSD version/GSD revision</li> </ul>                     | V2.3 / -                      |
| 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 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   |                               |
| <ul> <li>Transmission rate, max.</li> </ul>                                    | 115.2 kbit/s                  |
| <ul> <li>Cable length, max.</li> </ul>   | 1 200 m                       |
| RS 422   |                               |
| <ul> <li>Transmission rate, max.</li> </ul>                                    | 115.2 kbit/s                  |
| <ul> <li>Cable length, max.</li> </ul>   | 1 200 m                       |
| <ul> <li>4-wire full duplex connection</li> </ul>                              | 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)  | None, even, ouu, aiways i, aiways o, any   |
| — Telegram length, max.                                       | 4 kbyte  |
| — Bits per character  | 7 or 8   |
| — Number of stop bits   | 1 or 2 bit   |
|   |  |
| — Parity<br>Modbus RTU master                                 | None, even, odd, always 1, always 0, any   |
|   | the 247 outended the CEE2E   |
| — 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   |  |
| <ul> <li>Buffer memory for telegrams</li> </ul>               | 8 kbyte  |
| <ul> <li>Number of telegrams which can be buffered</li> </ul> | 255  |
| Interrupts/diagnostics/status information                     |  |
| Diagnostics function  | Yes  |
| Alarms  |  |
| <ul> <li>Diagnostic alarm</li> </ul>                          | 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   |
| <ul> <li>horizontal installation, max.</li> </ul>             | 60 °C  |
| vertical installation, min.                                   | 0°C  |
| <ul> <li>vertical installation, max.</li> </ul>               | 40 °C  |
| Altitude during operation relating to sea level               | 40 C   |
| Installation altitude above sea level, max.                   | 5 000 m; restrictions for installation altitudes > 2 000 m, and ET 200MP               |
|   | 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP system manual |
| Decentralized operation                                       |  |
| to SIMATIC S7-300   | Yes  |
| to SIMATIC 37-300   | Yes  |
| to SIMATIC 37-400   | Yes  |
| to standard PROFINET controller                               | Yes  |
|   |  |
| Dimensions  | 25 mm  |
| Width   | 35 mm  |
| Height  | 147 mm   |
| Depth   | 127 mm   |
| Weights   |  |
| Weight, approx.   | 0.22 kg  |
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