# Technical specifications

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## Technical specifications of the CM PtP communication module

| | 6ES7137-6AA00-0BA0 |
|---|---|
| Product type designation | ET 200SP CM PtP |
| **General information** | |
| • I&M data | Yes: I&M 0 |
| Engineering with | |
| STEP 7 TIA Portal can be configured/integrated as of version | V12.0 / V12.0 |
| STEP 7 can be configured/integrated as of version | V5.5 SP2 or higher with a GSD file |
| PROFIBUS as of GSD version/GSD revision | - / - |
| PROFINET as of GSD version/GSD revision | V2.3 |
| **Installation type/mounting** | |
| • Rail mounting possible | Yes; standard - DIN rail |
| **Supply voltage** | |
| Voltage type of supply voltage | 24 V DC |
| • Rated value (DC) | 24 V |
| • Low limit of valid range (DC) | 19.2 V |
| • High limit of valid range (DC) | 28.8 V |
| • Reverse polarity protection | Yes |
| **Input current** | |
| • Current consumption (rated value) | 29 mA |
| **Power loss** | |
| • Power loss, typ. | 0.7 W |
| **Address area** | |
| Occupied address area | |
| • Inputs | 8 bytes |

| | 6ES7137-6AA00-0BA0 |
|---|---|
| **Interfaces** | |
| 1. Interface | |
| Interface hardware | |
| • RS 232 | Yes |
| • RS 422 | Yes |
| • RS 485 | Yes |
| **Interface hardware** | |
| RS 232 | |
| • Transmission rate, max. | 115.2 kbps |
| • Max. cable length | 15 m |
| RS-232 accompanying signals | RTS, CTS, DTR, DSR, RI, DCD |
| RS 485 | |
| • Transmission rate, max. | 115.2 kbps |
| • Max. cable length | 1200 m |
| RS 422 | |
| • Transmission rate, max. | 115.2 kbps |
| • Max. cable length | 1200 m |
| • 4-wire full duplex connection | Yes |
| • 4-wire multipoint connection | Yes |
| **Protocols** | |
| Integrated protocols | |
| Freeport | |
| • Frame length, max. | 2 kbyte |
| • Bits per character | 7 or 8 |
| • Number of stop bits | 1 or 2 bits |
| • Parity | None, even, odd, always 1, always 0, any |
| 3964 (R) | |
| • Frame length, max. | 2 kbyte |
| • Bits per character | 7 or 8 |
| • Number of stop bits | 1 or 2 bits |
| • Parity | None, even, odd, always 1, always 0, any |
| Modbus RTU master | |
| Address area | 1 to 247, extended 1 to 65,535 |
| • Max. number of slaves | 32 |

| | 6ES7137-6AA00-0BA0 |
|---|---|
| Modbus RTU slave | |
| Address area | 1 to 247, extended 1 to 65,535 |
| Frame buffer | |
| • Buffer memory for frames | 4 kbyte |
| • Number of frames which can be buffered | 255 |
| **Interrupts/diagnostics/status information** | |
| Interrupts | |
| • Diagnostic interrupt | Yes |
| • Hardware interrupt | No |
| Diagnostic messages | |
| Diagnostics | Yes |
| • Wire break | Yes |
| Diagnostics display LED | |
| • Monitoring of supply voltage | Yes; green PWR-LED |
| • For module diagnostics | Yes; green/red DIAG-LED |
| • Receive RxD | Yes; green LED |
| • Send TxD | Yes; green LED |
| **Electrical isolation** | |
| • between backplane bus and interface | Yes |
| **Permitted potential difference** | |
| Between the different circuits | 75 V DC / 60 V AC (Basic insulation) |
| **Insulation** | |
| Insulation tested with | 707 V DC (Type Test) |
| **Ambient conditions** | |
| Operating temperature | |
| • Horizontal installation, min. | 0 °C |
| • Horizontal installation, max. | 60 °C |
| • Vertical installation, min. | 0 °C |
| • Vertical installation, max. | 50 °C |
| **Distributed operation** | |
| • At SIMATIC S7-300 | Yes |
| • At SIMATIC S7-400 | Yes |
| • At SIMATIC S7-1200 | No |
| • At SIMATIC S7-1500 | Yes |
| • At Standard Profinet Controller | Yes |

| | 6ES7137-6AA00-0BA0 |
|---|---|
| **Dimensions** | |
| • Width | 15 mm |
| • Height | 73 mm |
| • Depth | 58 mm |
| **Weights** | |
| • Weight, approx. | 30 g |

Additional general technical specifications for SIMATIC ET 200SP can be found in the system manual S7-1500 Automation System (http://support.automation.siemens.com/WW/view/en/59191792).

# Dimensional drawing

# A

In this appendix, you will find the dimensional drawing of the communication module, inserted into a BaseUnit and mounted on a DIN rail. You have to consider the dimensions during installation in control cabinets, control rooms, etc (BaseUnit: 6ES7193-6BP00-0xA0).

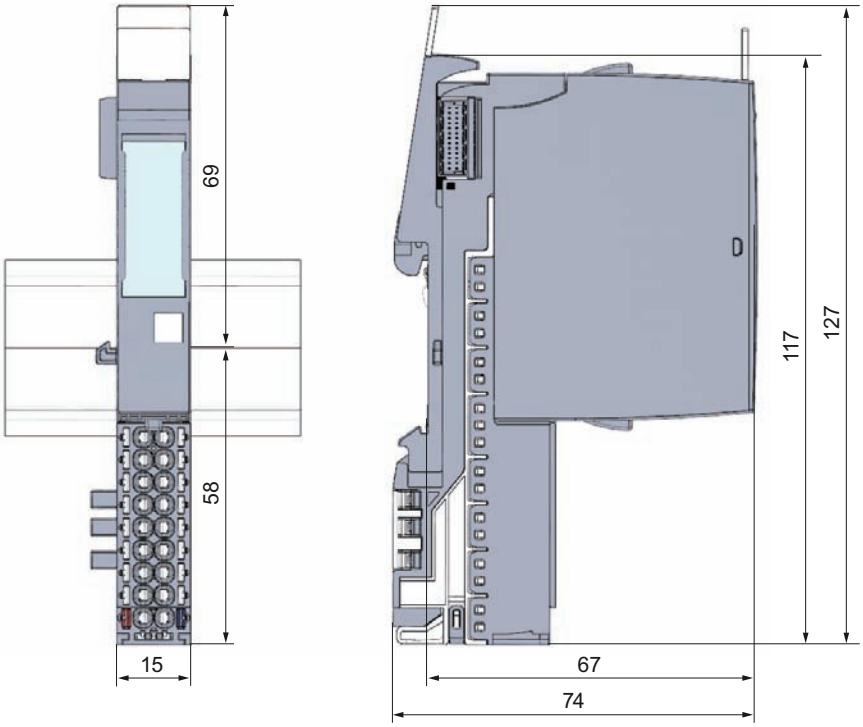



Figure A-1 Dimensional drawing of the CM PtP communication module