



SIMATIC S7-1200, Communication Board CB 1241, RS485, terminal block, supports Freeport

| General information                       |   |
|---|---|
| Product type designation                  | CB 1241 RS 485  |
| Input current                             |   |
| from backplane bus 5 V DC, typ.           | 50 mA   |
| Power loss                                |   |
| Power loss, typ.                          | 1.5 W   |
| Interfaces                                |   |
| Point-to-point connection                 |   |
| • Cable length, max.                      | 1 000 m   |
| Integrated protocol driver                |   |
| — Freeport                                | Yes   |
| — ASCII                                   | Yes; Available as library function  |
| — Modbus RTU master                       | Yes   |
| — Modbus RTU device                       | Yes   |
| — USS                                     | Yes; Available as library function  |
| Protocols                                 |   |
| Integrated protocols                      |   |
| Freeport                                  |   |
| — Telegram length, max.                   | 1 kbyte   |
| — Bits per character                      | 7 or 8  |
| — Number of stop bits                     | 1 (Standard), 2   |
| — Parity                                  | No parity (standard); even, uneven, mark (parity bit always 1); space (parity bit always 0)   |
| 3964 (R)                                  |   |
| — Telegram length, max.                   | 1 kbyte   |
| — Bits per character                      | 7 or 8  |
| — Number of stop bits                     | 1 (Standard), 2   |
| — Parity                                  | No parity (standard); even, uneven, mark (parity bit always 1); space (parity bit always 0)   |
| Modbus RTU master                         |   |
| — Address area                            | 1 through 49 999 (Standard Modbus addressing)   |
| — max. number of devices                  | 247; slave numbers 1 through 247, per MODBUS network segment maximum 32 devices, additional repeaters needed to expand the network to maximum configuration |
| MODBUS RTU slave                          |   |
| — Address area                            | 1 through 49 999 (Standard Modbus addressing)   |
| Interrupts/diagnostics/status information |   |
| Diagnostics function                      | Yes   |
| Degree and class of protection            |   |
| IP degree of protection                   | IP20  |
| Standards, approvals, certificates        |   |

|   |                                       |
|---|---------------------------------------|
| CE mark   | Yes                                   |
| CSA approval                                      | Yes                                   |
| UL approval                                       | Yes                                   |
| cULus   | Yes                                   |
| FM approval                                       | Yes                                   |
| RCM (formerly C-TICK)                             | Yes                                   |
| KC approval                                       | Yes                                   |
| Marine approval                                   | Yes                                   |
| <b>Ambient conditions</b>                         |                                       |
| Free fall   |                                       |
| • Fall height, max.                               | 0.3 m; five times, in product package |
| Ambient temperature during operation              |                                       |
| • min.  | -20 °C                                |
| • max.  | 60 °C                                 |
| • horizontal installation, min.                   | -20 °C                                |
| • horizontal installation, max.                   | 60 °C                                 |
| • vertical installation, min.                     | -20 °C                                |
| • vertical installation, max.                     | 50 °C                                 |
| • permissible temperature change                  | 5°C to 55°C, 3°C / minute             |
| Ambient temperature during storage/transportation |                                       |
| • min.  | -40 °C                                |
| • max.  | 70 °C                                 |
| Air pressure acc. to IEC 60068-2-13               |                                       |
| • Operation, min.                                 | 795 hPa                               |
| • Operation, max.                                 | 1 080 hPa                             |
| • Storage/transport, min.                         | 660 hPa                               |
| • Storage/transport, max.                         | 1 080 hPa                             |
| Relative humidity                                 |                                       |
| • Operation at 25 °C without condensation, max.   | 95 %                                  |
| <b>Dimensions</b>                                 |                                       |
| Width   | 38 mm                                 |
| Height  | 62 mm                                 |
| Depth   | 21 mm                                 |
| <b>Weights</b>                                    |                                       |
| Weight, approx.                                   | 40 g                                  |

last modified:

3/12/2024 