

485LDRC9

Industrial RS-232 to RS-422/485 Converter



- ✓ **Extend Data up to 4000 ft / 1.2 km**
- ✓ **2000V Optically Isolated Data Lines**
- ✓ **Wide Operating Temperature**
- ✓ **Modbus ASCII/RTU**
- ✓ **Automatic Send Data Control**
- ✓ **Switchable 120Ω Termination**

The 485LDRC9 is an optically isolated RS-232 to RS-422/485 Converter. RS-232 signals interface through a convenient DB9 F connector or through a terminal block. RS-422/485 signals and the power inputs connect to the terminal block. Built in Send Data Control circuitry eliminates the need for external software to control handshake signals.

Optically isolated data lines, with 500W surge suppression, ensures that the connected equipment is protected even in the harshest of environments.

The converter operates on externally sourced 10 – 30 VDC power. The enclosure has a DIN rail mount that is designed to fit easily on a standard 35mm rail. The 485LDRC9 is ideal for your critical industrial communications needs.

Specifications

| RS-232 | |
|-------------|-------------------------------------|
| Connector | DB9 F (DCE) |
| Signals | TD, RD, GND |
| RS-422 | |
| Connector | Terminal Block |
| Signals | TDA(-), TDB(+), RDA(-), RDB(+), GND |
| Termination | 120Ω (Switchable) |
| RS-485 | |
| Connector | Terminal Block |
| Signals | TDA(-), TDB(+), RDA(-), RDB(+), GND |
| Modes | 2-Wire and 4-Wire |
| Termination | 120Ω (Switchable) |

Isolation

| | |
|-----------------|------------|
| Lines Protected | Data Lines |
| Method | Optical |
| Rating | 2000 V |

Surge Suppression

| | |
|-----------------|---|
| Lines Protected | Data Lines |
| Method | TVS |
| Rating | 7.5V bi-directional avalanche breakdown device 500W peak power dissipation |
| Response Time | < 1 pico-second |

Industrial Bus

MODBUS ASCII/RTU

Power

| | |
|-------------------|----------------|
| Connector | Terminal Block |
| Voltage | 10 to 30 VDC |
| Power Consumption | 0.5 W |
| Source | External |

Terminal Blocks

| | |
|-----------|--------------|
| Wire Size | 24 to 14 AWG |
| Torque | 4 kgf-cm |

LED Indicators

| | |
|-------------|---------------------------------------|
| Power (RED) | On when power applied |
| TD (RED) | Flashes when RS-422/485 data sent |
| RD (RED) | Flashes when RS-422/485 data received |

Enclosure

| | |
|------------|--|
| Material | Plastic |
| IP Rating | 30 |
| Dimensions | 1.0 x 3.1 x 3.7 in (2.5 x 7.9 x 9.5 cm) |
| Mounting | 35 mm DIN (Panel Mount Adapter is available) |

Environmental

| | |
|-----------------------|----------------------------|
| Operating Temperature | -40 to 80 C (-40 to 176 F) |
| Storage Temperature | -40 to 85 C (-40 to 185 F) |
| Operating Humidity | 0 to 95% Non-condensing |
| MTBF | 257448 hours |

MTBF Calculation Method: Parts Count Reliability Prediction
Agency Approvals
 CE, FCC
 Declaration of Conformity available for download at www.bb.elec.com

Ordering Information

| | |
|--------------|---------------------------------|
| Model Number | 485LDRC9 |
| Power Supply | An external source is required. |

| | |
|---------------------|--|
| Panel Mount Adapter | DRPM25 |
| Serial Cables | Various serial cables are available visit www.bb-elec.com |

