# BB-485LDRC9

## RS-422/485 Converter, Industrial

### Features
- Converts RS-232 to RS-422/485
- 2 kV optical isolation on input/output; 500W surge suppression
- 115.2 kbps data rate; extends data up to 1.2 km
- -40 to +80 °C wide operating temperature
- 35 mm DIN rail mount
- cULus Recognized, CE
- Modbus compatible
- External power supply required (not included)
- Automatic Send Data control - no software drivers required

### Specifications

#### Serial Technology

<table>
<thead>
<tr>
<th>Data Rate</th>
<th>Option 1: Connector</th>
<th>Option 1: Signals</th>
<th>Option 2: Connector</th>
<th>Option 2: Signals</th>
<th>Connector</th>
<th>Signals</th>
<th>Modes</th>
<th>Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>115.2 kbps</td>
<td>DB9 female (DCE)</td>
<td>TD, RD, GND</td>
<td>Terminal block</td>
<td>TD, RD, GND</td>
<td>Terminal block</td>
<td>TDA(-), TDB(+), RDA(-), RDB(+), GND</td>
<td>2-wire and 4-wire</td>
<td>120 Ohms (switchable)</td>
</tr>
</tbody>
</table>
- **RS-232**
- **RS-422**
- **RS-485**

#### Isolation
- Lines Protected: Data lines
- Method: Optical
- Rating: 2,000 V

#### Surge Suppression
- Lines Protected: Data lines
- Method: TVS
- Rating: 7.5V bi-directional avalanche breakdown device
- Response Time: < 1 pico-second

#### Industrial Bus
- Modbus: ASCII / RTU
- Modbus: EM

#### Power
- Connector: Terminal block
- Voltage: 10-30 Vdc
- Consumption: 0.5 W
- Source: External power source required (not included)

#### Terminal Blocks
- Wire Size: 24 to 14 AWG
- Torque: 4 kfg-cm

#### LED Indicators
- Power (RED): On when power applied
- TD (RED): Flashes when RS-422/485 data is transmitted
- RD (RED): Flashes when RS-422/485 data is received

#### Enclosure
- Material: Plastic
- IP Rating: 20
- Dimensions: 25 x 79 x 95 mm
- Mounting: 35 mm DIN rail

#### Environmental
- Operating Temperature: -40 to +80 °C
- Storage Temperature: -40 to +85 °C
- Operating Humidity: 0 to 95%, non-condensing

### Meantime Between Failures (MTBF)
- MTBF: 257,448 hours
- Calculation Method: MIL 217F Parts Count Reliability Prediction

### Regulatory / Approvals / Certifications
- cULus Recognized, KCC

### Ordering Information
- **BB-485LDRC9** RS/422/485 Converter, Industrial
- **BB-9PAMF6** RS-232 DB9 male to DB9 female serial cable, 1.8 m (6 ft)

### Accessories – sold separately
- **BB-9PAMF6**

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All product specifications are subject to change without notice. Last updated: 8-Apr-2021