BB-4850PDR

RS-422/485 Repeater, Industrial

Specifications

**RS-422/485**
- **Connector**: Terminal block
- **Signals**: TDA(-), TDB(+), RDA(-), RDB(+), GND
- **RS-422**: 4-wire, RS-485**: 2-wire and 4-wire.
- **Data Rate**: Up to 115.2 kbps (switch selectable)
- **Isolation**: Optical
- **Rating**: 2000 V
- **Surge Suppression**: TVS
- **Rating**: 6.5V bi-directional avalanche breakdown device
- **Response Time**: <1 pico-second
- **Industrial Bus**: Modbus ASCII / RTU

**Power**
- **Connector**: Terminal block
- **Voltage**: 10 to 30 VDC
- **Power Consumption**: 0.7 W
- **Source**: External source required

**Terminal Blocks**
- **Wire Size**: 24 to 14 AWG
- **Torque**: 4 kgf-cm

**LED Indicators**
- **2 Data LEDs (red)**: Data LED for each side of isolator
- **Flashes when data transmitted**

**Enclosure**
- **Material**: Plastic
- **IP Rating**: 20
- **Dimensions**: 2.5 x 7.9 x 10.6 cm
- **Mounting**: 35 mm DIN rail (panel mount adapter, sold separately)

**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**: 225,299 hours
- **MTBF Calc. Method**: MIL217F Parts Count Reliability

Features
- Extends RS-422/485 data additional 1.2 km
- 2000 V optical isolation for data lines; 600 W surge suppression
- -40 to +80 °C wide operating temperature
- DIN rail mount (panel mount with optional adapter)
- Automatic Send Data control - no software drivers needed
- cULus Recognized, UL Recognized, CE, FCC
- 10-30 V power supply required (not included, sold separately)

Approvals, Directives, Standards
- **Agency Approvals**: CE, FCC, KCC, cULus Recognized, UL508 UL Recognized
- **EU Directives**: 2014/30/EU – Electromagnetic Compatibility Directive
  2015/863/EU – Reduction of Hazardous Substances Directive (RoHS)
  2012/19/EU – Waste Electrical & Electronic Equipment (WEEE)
- **EU EMC Standards**: EN 55032 Class A – Electromagnetic Compatibility of Multimedia Equipment – Emission Requirements
  EN 55024 – Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement
  EN 61000-6-1 – Generic immunity standard for residential, commercial and light-industrial environments

Ordering Information
- **BB-4850PDR**: RS-422/485 Repeater, Industrial

Accessories – sold separately
- BB-MDR-20-24: Power supply, 24VDC, 1.0 A output, DIN rail mount
- BB-MDR-40-24: Power supply, 24VDC, 1.7 A output, DIN rail mount
- BB-EK-CLIP-MPC: DIN rail clip for enclosure

Dimensions

All product specifications are subject to change without notice.
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