Model 485OPDR is a 2kV optically isolated RS-422/485 line repeater that can isolate a piece of equipment from the rest of the network. 600W surge suppression ensures that connected equipment is protected even in the harshest of environments.

As a repeater, it extends the distance of an existing network an additional 1.2 km (4000 ft) and expands it beyond the typical 32-node limitation. Data signals and power inputs connect to the terminal block. Supports 2-wire RS-485, 4-wire RS-485 and RS-422. Automatic Send Data Control means no software drivers required to install or manage.

Model 485OPDR operates on externally sourced 10 to 30 VDC power. The DIN rail mount enclosure is designed to fit easily on a standard 35mm rail.

### PRODUCT FEATURES
- Extends RS-422/485 data additional 1.2 km (4000 ft)
- 2000V optical isolation for data lines; 600W surge suppression
- -40 to +80 °C wide operating temperature
- DIN rail mount (panel mount with optional adapter)
- CE, FCC
- cULus Recognized, UL Recognized
- Modbus ASCII / RTU

### SPECIFICATIONS

#### RS-422/485
- **Connector**: Terminal block
- **Signals**: TDA(-), TDB(+), RDA(-), RDB(+), GND

#### ISOLATION
- **Method**: Optical
- **Rating**: 2000 V

#### SURGE SUPPRESSION
- **Method**: 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 9.5 cm (1.0 x 3.1 x 3.7 in)
- **Mounting**: 35 mm DIN Rail (panel mount adapter, sold separately)

#### 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**: 225299 hours
- **MTBF Calc. Method**: MIL217F Parts Count Reliability

#### APPROVALS, DIRECTIVES, STANDARDS
- **Agency Approvals**: CE, FCC, cULus Recognized, File E222870
- **UL508 UL Recognized**

All product specifications are subject to change without notice.

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