SER-485-IR Industrial Isolated Converter

N-Tron Networking Series



Industrial Isolated Converter

The SER-485-IR is our premium Industrial RS-422/485 Isolated Repeater. Designed for rugged industrial environments, it is UL listed and certified for use in Class 1 Division 2 locations. Powerful Optical Isolation on both data ports protects your equipment and data from damaging ground loops and surges. Additional isolation on the power supply circuits adds a third degree of protection.

PRODUCT FEATURES

- Supports Data Rates up to 115.2 Kbps
- Extends Signal 4,000 feet (1200 Meters)
- Wide -40 to 80°C Temperature Range
- 10 to 48 VDC Input Power Range
- 2000 V 3-Way Optical Isolation
- UL Class 1 DIV 2 Listed
- Built-in, Switchable Termination & Bias

PRODUCT OVERVIEW

Packaged in a rugged ABS plastic case, this repeater operates in wide temperature extremes. With a 35mm DIN rail mounting bracket, the SER-485-IR is easy to integrate into your control panel or other industrial equipment.

Installation and configuration is easy with DIP switches to set up baud rate and serial communications mode. Removable terminal blocks make wiring a snap. Power is connected through separate terminal block that accepts 10 to 48 VDC from any external source.

Specifications

Serial Technology

RS-422 RS-485 4-Wire RS-485 2-Wire Serial Connector Data Rate Isolation Surge Protection

Industrial Bus Bias Termination TD, RD, GND TDA(-), TD(B+), RDA(-), RDB(+) Data A(-), Data B(+) 5 Position, Removable Terminal Block 2.4 to 115.2 kbps 2KV RMS, 1 minute 600 W Peak Power Dissipation Clamping time < 1 pico-second MODBUS ASCII/RTU Built-in, Switchable, 1.2KΩ XMT/RCV Built-in, Switchable, 120Ω



Power

Source Power Connector Input Voltage Power Consumption

Power Supply Part #

Terminal Blocks

Wire Size Accepted Pitch Insulation Resistance Maximum Torque

Indicators

Power Data

Mechanical Dimensions

Enclosure Weight MTBF MTBF Calc. Method

Environmental

Op Temperature Storage Temp Op Humidity RegulatoryApprovals

External

2 Position Removable Terminal Block 10 to 48 VDC (56 VDC max) 0.5 W (Typical), 1.3 W (termination on both sides) NTPS 24-1.3

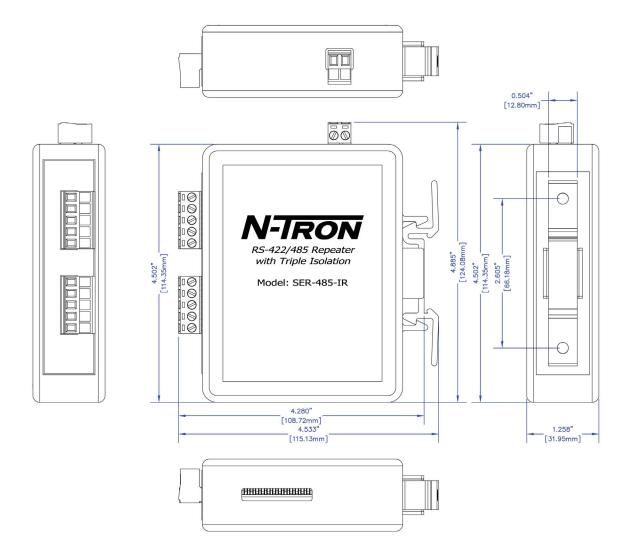
28 to 12 AWG 5.08 mm ≥ 500 MΩ @ 500 VDC 5 Kg / cm

Red LED Red LED For Each Data Port

4.9 x 4.5 x 1.3 in (12.3 x 11.3 x 3.2 cm) IP 20 Plastic, 35 mm DIN Mount 0.49 lbs (222 g) 114696 hours Parts Count Reliability Prediction

- 40 to 80°C (-40 to 176°F) - 40 to 85°C (-40 to 185°F) 0 to 95% Non-condensing FCC, CE, UL UL Class 1 DIV 2 Groups A, B, C, D







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