SER-485-IC Industrial Isolated Converter

N-Tron Networking Series

Industrial Isolated Converter

The SER-485-IC is our premium Industrial RS-232 to RS-422/485 Isolated Converter. Designed for rugged industrial use, it is UL approved and certified for operation in Class 1 Division 2 environments.

PRODUCT FEATURES

- Data Rates up to 115.2 Kbps
- 10-48 VDC Input Power Range
- Wide Operating Temperature
- 3-Way 2000V Optical Isolation
- Modbus ASCII/RTU Compatible
- UL Class 1 Division 2
- Built-in, Switchable Termination & Bias

PRODUCT OVERVIEW

This DIN rail mountable converter optically isolates and converts unbalanced, full or half-duplex RS-232 signals to balanced RS-422/485 signals at baud rates up to 115.2 Kbps. In addition to optical isolation, the unit has surge suppression on the RS-422/485 lines. FeaturingAutomatic Send Data Control circuitry, it does not require special software control of handshake signals in RS-485 mode. The removable terminal blocks for power and RS-422/485 signals make wiring easy. It is powered by a supply voltage of 10 to 48 VDC which is isolated from all data and signal ground lines. Configuration is made easy with a 12 position DIP switch on the bottom of the converter.

Specifications

Serial Technology

RS-232 RS-422 RS-485 4-Wire RS-485 2-Wire RS-232 CON. RS-422/485 CON. Data Rate Isolation Surge Protection

Bias

Termination

ind<u>ustrial</u>

networking

TD, RD, GND TDA(-), TDB(+), RDA(-), RDB(+) TDA(-), TDB(+), RDA(-), RDB(+), GND Data A(-), Data B(+) DB9 Female (DCE) 5 Position, Removable Terminal Block 1.2 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



External

NTPS 24-1.3

28 to 12 AWG

≥ 500 MΩ @ 500 VDC

5.08 mm

5 Kg / cm

Red LED

Power

Source Power Connector Input Voltage Power Consumption Power Supply Part #

Terminal Blocks

Wire Size Accepted Pitch Insulation Resistance Maximum Torque

Indicators

Power TD/RD

Mechanical

Dimensions Enclosure Weight MTBF MTBF Calc. Method

Environmental

Op Temperature Storage Temp Op Humidity RegulatoryApprovals Red LED 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 0.45 lbs (204 g)

2 Position Removable Terminal Block

0.5 W (Typical), 0.9W (w/Termination)

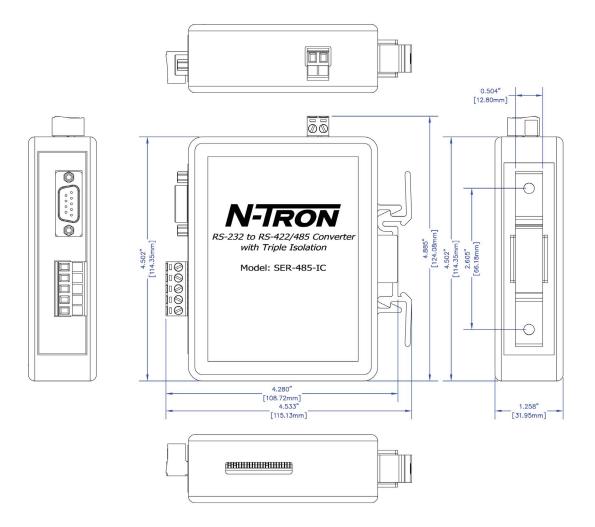
10 to 48 VDC (56 VDC max)

254617 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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