

Isolated RS-422/485 Repeater



RUS-9510A

Features

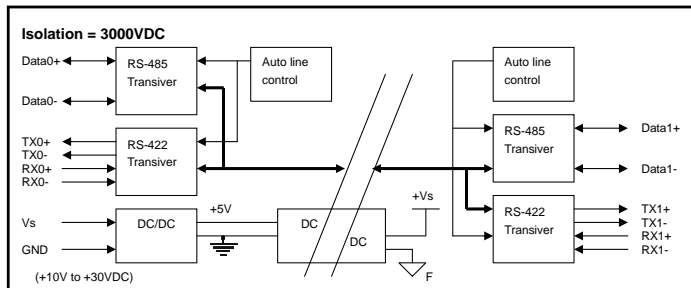
- High Performance Design**
 - ✓ Automatic internal RS-422/485 bus supervision
 - ✓ No external flow control signals required for RS-485
 - ✓ Transient suppression on RS-485 data lines
 - ✓ Supported baud rate up to 115.2Kbps
 - ✓ Reach distance up to 4000 feet (1200m)
 - ✓ Reserved space for termination resistors (R8,R9)
- Robust Industrial Design**
 - ✓ Robust ABS housing with captive mounting hardware
 - ✓ Supports operating temperature -25 to 75°C
 - ✓ DIN-Rail or Panel mount
- Reliable Power Design**
 - ✓ Minimum 3000 VDC isolation protection
 - ✓ Power and data flow indicator for troubleshooting
 - ✓ Power requirement: +10V to +30VDC



Overview

The Retriever RUS-9510A repeater extends RS-422/485 signals distance up to 4000 ft (1200m) and increase the maximum number of connected nodes up to 128. With a special circuitry, RUS-9510A is able to automatically detect the data flow and switch the direction of the data lines accordingly. "Auto baud rate detector" enables RUS-9510A to automatically configure RS-422/485 signals to any baud rate without external switch setting. The built-in opto-isolation on RUS-9510A provides 3000 VDC isolation to protect the host computer from ground loops and destructive voltage spikes on the RS-422/485 data lines. RUS-9510A also offers internal surge-protection on the data lines. Internal high-speed transient suppressors on each data line protect the module from dangerous voltages levels or spikes.

Block Diagrams



Hardware Specifications

Serial Interface

Input: RS-422/485

Output: RS-422/485

Isolation Protection: 3000VDC

Supported Baud Rate:

1200, 2400, 4800, 9600, 19.2K, 38.4K, 57.6K, 115.2K

RS-422 Signals: Tx+, Tx-, Rx+, Rx-

RS-485 Signals: Data+, Data-

Plug-in Screw/Terminal Wiring:

Accepts AWG 1-#12 to #22 (0.5 to 2.5mm) wires

Physical

Case: ABS with captive mounting hardware

Accessories:

NYLON DIN-rail Mounting Adapter SECC Panel Mounting Bracket

Dimension: 7 x 10 x 2 cm

Weight: 0.4 kg

Power

Power Requirements:

Unregulated +10 to +30VDC with protection from power reversals

Power Consumption: 2.2 watts

Environmental

Operating Temp: -25 to 75°C

Storage Temp: -40 to 80°C

Operating Humidity: 5% to 95% RH (non-condensing)

Regulatory Approvals

EMI: FCC

Safety: CE

Environmental: WEEE, RoHS

MTBF: 300,000 hrs based on Mil-Hdbk-217F, GB

Warranty: 5 years