### EX-9510

#### Isolated RS-422/485 Repeater

#### Introduction

The EX-9510 repeater boosts the RS-422/485 signals to extend the reach distance up to 4000 ft (1200m) and increase the maximum number of connected nodes up to 128.

With a special circuitry, EX-9510 is able to automatically detect the data flow and switch the direction of the data lines accordingly.

"Auto baud rate detector" enables EX-9510 to automatically configure RS-422/485 signals to any baud rate without external switch setting.

Build in Opto-isolations on EX-9510 provides 3000VDC of isolation to protect the host computer from ground loops and destructive voltage spikes on the RS-422/485 data lines.

EX-9510 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.

#### **Features**

- Automatic internal RS-422/485 bus supervision
- No external flow control signals required for RS-485
- Minimum 3000VDC isolation protection
- 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)
- Power and data flow indicator for troubleshooting
- Power requirement: +10V to +30VDC
- Mounts easily on DIN-rail or panel

#### **Specifications:**

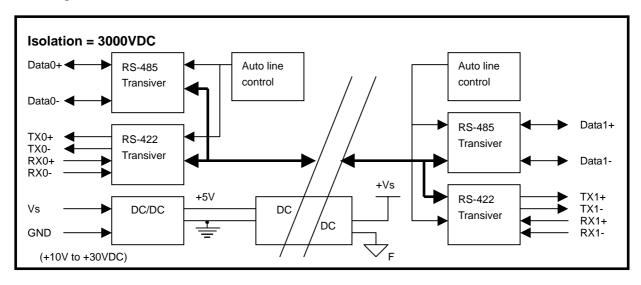
- Power requirement: Unregulated +10 to +30VDC with protection from power reversals
- Case: ABS with captive mounting hardware
- Accessories (Supplied): NYLON DIN-rail Mounting Adapter SECC Panel Mounting Bracket
- Plug-in screw terminal wiring: Accepts AWG 1-#12 to #22 (0.5 to 2.5mm) wires
- Supported baud rate (bps): 1200, 2400, 4800, 9600, 19.2K, 38.4K, 57.6K, 115.2K
- Isolation voltage: 3000VDC
- RS-422/RS-485 connector: plug-in screw terminal
- Power consumption: 0.7W
- Operating temperature:  $0 \sim 70$  (32~158)
- Storage temperature: -25~85 (13~185)
- Humidity: 5~95%, non-condensing

## **Power supply**

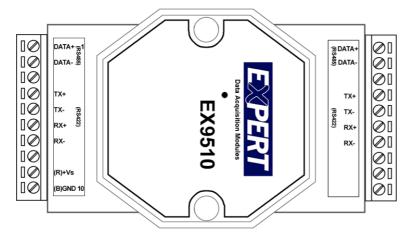
EX series modules are designed to accept industry standard +24VDC unregulated power. Operation is guaranteed when using any power supply between +10 and +30VDC.

Power ripples must be limited to 5V peak to peak while the voltage in all cases must be maintained between +10V and +30VDC. All power supply specifications are referenced at module connector.

# **Block diagram**



### Connection



#### **Dimensions**

