

EDAM-8510

Isolated RS-422/485 Repeater

Introduction

The EDAM-8510 repeater boosts the RS-422/485 signals to extend the reach distance up to 4000 ft (1200 m) and increase the maximum number of connected nodes up to 128.

With a special circuitry, EDAM-8510 is able to automatically detect the data flow and switch the direction of the data lines accordingly.

“Auto baud rate detector” enables EDAM-8510 to automatically configure RS-422/485 signals to any baud rate without external switch setting.

Build in Opto-isolators on EDAM-8510 provides 3000 Vdc of isolation to protect the host computer from ground loops and destructive voltage spikes on the RS-422/485 data lines.

EDAM-8510 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 3000 V DC isolation protection
- Transient suppression on RS-485 data lines
- Supported baudrate up to 115.2 Kbps
- Reach distance up to 4000 feet (1200 m)
- Reserved space for termination resistors(R8,R9)
- Power and data flow indicator for troubleshooting
- Power requirement: +10 to +30 Vdc
- Mounts easily on DIN-rail or panel

Specifications:

- Power requirement: Unregulated +10 to +30 V DC 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 2.5 mm) wires
- Supported baudrates (bps): 1200, 2400, 4800, 9600, 19.2 K, 38.4 K, 57.6 K, 115.2 K
- Isolation voltage: 3000 Vdc
- RS-422/RS-485 connector: plug-in screw terminal
- Power consumption: 0.7W
- Operating temperature: 0 ~ 70 °C (32 ~ 158 °F)
- Storage temperature: -25 ~ 85 °C (13 ~ 185 °F)
- Humidity: 5 ~ 95%, non-condensing

Power supply

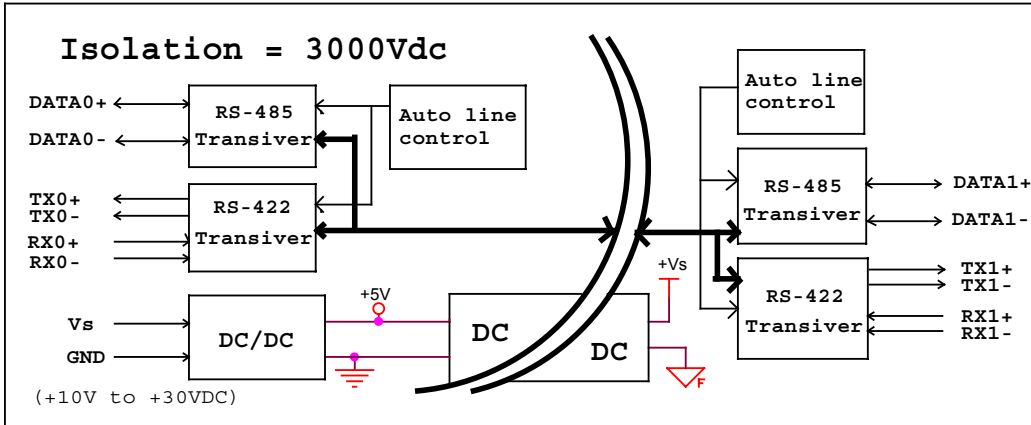
EDAM modules are designed to accept industry standard +24 Vdc unregulated power. Operation is guaranteed when using any power supply between +10 and +30 Vdc.

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

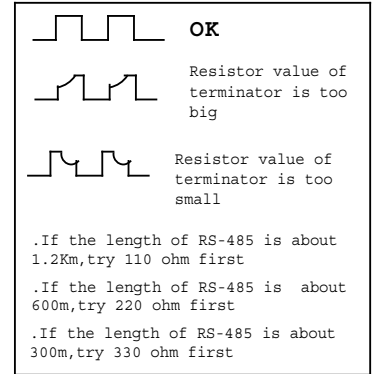
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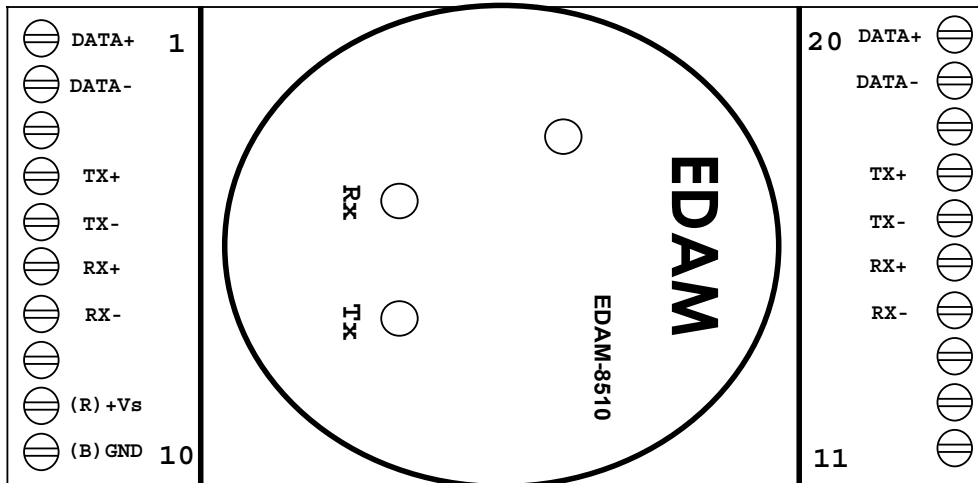
Block diagram



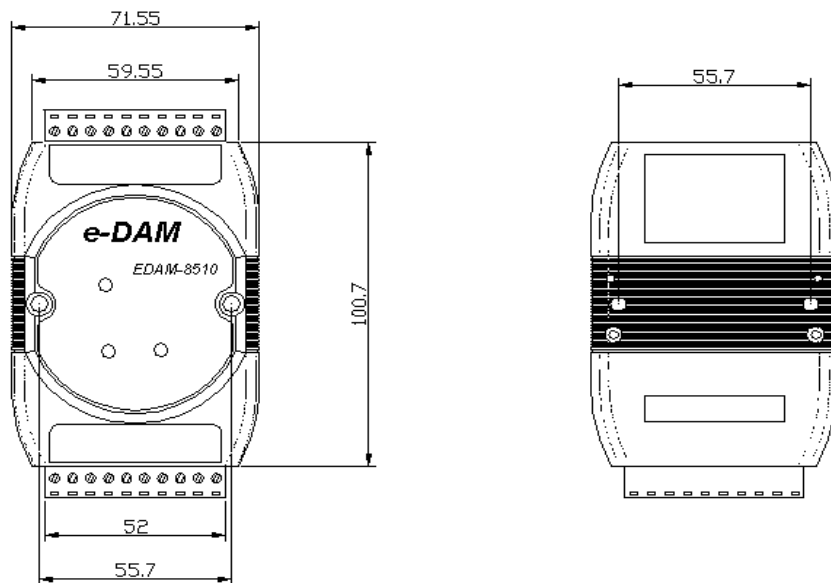
Terminate RES. (R8,R9)



Connection



Dimensions



Dimensions are shown in mm