RS2 Technologies

a family of access management hardware solutions

MUX-8

The MUX-8 is an 8-port multiplexer that can multiplex eight 2-wire RS-485 communication channels

RS2 Technologies has developed an integrated family of access management hardware that can be configured to meet a wide variety of applications. The RS2 family includes a selection of Interface Modules, Input/Output Modules, and Multiplexers that add functionality and flexibility to the System Control Processor line. RS2 Multiplexers are devices that are designed to expand a single data line into multiple data lines to meet difficult system design and installation challenges.

MUX-8

The RS2 MUX-8 is an eight-port RS-485 multiplexer that takes an RS-485 or RS-232 input and multiplexes eight 2-wire RS-485 communication channels. The MUX-8 utilizes bus-arbitration logic on a first-come, first-serve basis and can detect and deactivate a broken channel to protect the integrity of the communications bus. It offers the added flexibility of expanding a single data line into multiple data lines, thus providing numerous installation configuration options and giving system designers and installers the ability to manage complex, divergent installations.

Application Note

Common uses of the MUX-8 are for star topology wiring schemes, home-run wiring, or when wiring distances exceed the 4000-foot limit of the RS-485 standard.

The MUX-8 includes these features:

- •12 VDC operation
- •Accepts RS-232 and RS-485 inputs
- •Multiplexes single data line into multiple data lines
- •Universal I/O device characterization
- •Automatic fault port partitioning
- •Diagnostic LEDs for each port
- •Helps guard against good loop installation issues
- •Perfect for retrofit installations
- •UL,CE, RoHS

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▶ **Technical Specifications**

Primary Power:
12 VDC +/- 15%, 250 mA maximum

Interfaces:
Port1: RS- Port1: RS-232/RS-485, selectable
Ports 3, 5, 7, 9: RS-485, Transmit/Receive
Ports 2, 4, 6, 8: RS-485, Transmit/Receive,
or Receive Only

Cable Requirements:
Power: 1 twisted pair, 18 AWG

RS-485: 24 AWG, 4000' (1,200 m) maximum,
twisted pair with shield

RS-232: 24 AWG, 50' (15 m) maximum

For more information, please contact:

Dimensions:
5.0" x 6.0" x 1.0"
(127 mm x 152 mm x 25 mm)

Temperature:
0° to 70°C operational, -55° to +85°C storage

Humidity:
0%-95% RHNC

Standards:
UL, CE, RoHS

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