MM80MicroMux
Bus Module

Features

- RS232 to RS485 Converter
- Ultra-Compact, DIN Rail Enclosure
- C Programmable
- Supports Mux32 Protocol
- 9600 and 346K Baud Communication
- Peer-to-Peer Communication
- Screw Terminal Connections
- Low Cost
- Network up to 32 Devices
- Presence Input
- DIN Rail Mounting

Applications

- Material Handling
- Sortation Systems
- Work-in-Progress Monitoring
- Quality Control

Use With

- EMS Passive Read/Write
- EMS Passive Read Only
- RS232 Serial Device

EMS, a Datalogic Group Company, is the field-proven leader in the development and application of Radio Frequency Identification (RFID) Tags/Labels/PCBs, Antennas, Controllers and network interface modules for tough industrial environments. With over a dozen years of RFID successes in the automotive, electronics, material handling and food processing industries, EMS has built a global reputation in providing customers with complete supply chain solutions – from production to retail EMS has the complete solution!

Escort Memory Systems' (EMS) MicroMux is a compact, easy to use RS232 to RS485 multidrop bus Controller. Multidrop networks with MicroMux communications nodes expand the possibilities when connecting bar code readers, sensors, RFID Controllers, PCs and PLCs together. The MicroMux Module is quickly configured for network operation with DIP switch settings and serial commands and is compatible with the Mux32 protocol found in RFID controllers and bar code scanners. A MicroMux network can have as many as 32 MicroMux nodes with the possibility of more than one serial device attached to each node.

Technical Description

Each MicroMux is selected to act either as a master or slave on a Mux32 multidrop bus via DIP switches within the unit. The bus location of each MicroMux and communication mode, master/slave or peer-to-peer, are also set with the DIP switches. After the DIP switches are correctly set, bus operation starts with the master polling the slaves and transferring information. The master automatically updates the polling list by occasionally polling non-active unit numbers to determine if a new unit has been attached. Through the master, the network can be rewired, reprogrammed and tested. The MicroMux network can operate at two baud rates, either 9600 baud or the extremely high speed mode of 346K baud.

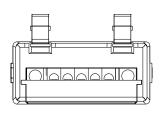**CREATE FLEXIBLE, INEXPENSIVE RS485 NETWORKS**

The module's standard program contain all the necessary functions for high speed data collection applications. Besides regulating traffic on the bus, the master downloads programs, and monitors: Data, starts, single steps, and stops nodes.
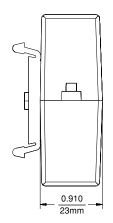
The standard program can be readily modified by EMS. For special applications, contact your EMS representative.
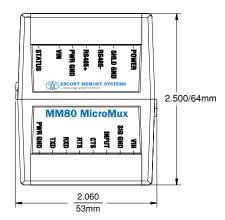
MM80MicroMux Bus Module

Electrical		
	Supply Voltage	8-30VDC
	Power Consumption	1.5 Watts
	Current Consumption	70mA Max. @24VDC with No Connected Devices

Serial Devices		
	Baud Rate	9600, 346K
	Parity	None
	Data Bits	8
	Stop Bits	1
	Max. Cable Length	50ft. (15m)

Input		
	Input	One TTL Presence Sensor Input, 0-5VDC

Mechanical Specifications		
	Dimensions (W x H x D)	0.91 x 2.5 x 2.06in. (23 x 64 x 53mm)
	Enclosure	Plastic
	Cables	User Supplied

Environment		
	Operating Temperature	32° to 120°F (0° to 49°C)
	Storage Temperature	-40° to 185°F (-40° to 85°C)
	Humidity	95% Non-Condensing
	Protection Class	NEMA 1 (IP30)

Mechanical Dimensions

inches / mm

Available Models

Model	Description
MM80	RS232 Serial to RS485/Mux32 Serial Interface Module, 8KB of Memory