## Emerald-MM-8P™



### 8-Port RS-232/422/485 PC/104™ Module



#### **Key Features**

- ♦ 8 serial ports, RS-232/422/485 protocols
- ◆ Software configurable protocols, addresses, and interrupts
- ♦ 16C654 UARTs with 64-byte FIFOs
- ♦ Up to 460.8Kbps maximum baud rates
- ◆ Supports interrupt sharing
- ♦ EEPROM storage of configuration data



#### **Product Overview**

Emerald-MM-8P offers 8 multi-protocol serial ports on a single PC/104 module with complete software configurability via the operating system. Each port can be individually selected for RS-232, RS-422, or RS-485 under software control. Both local-echo and non-local-echo modes are supported for RS-485. I/O addresses and interrupt levels are also programmable, with interrupt sharing available for any number of ports. Each port may further be enabled or disabled in software. All configuration data is stored in an on-board EEPROM that is loaded automatically on power-up.

Emerald-MM-8P offers 8 convenient digital I/O lines. The direction of each line is independently programmable. Diamond's Universal Driver software provides software support for these digital I/O lines.

Two I/O headers are provided, with four serial ports and four digital I/O lines on each header. The board operates on +5V only, eliminating the need for a +12V supply that is often required for serial port operation.



SPECIFICATIONS	
Serial ports	Eight
Protocols	RS-232/422/485 supported
Max baud rate	460.8Kbps
Communications	Five, six, seven or eight data bits Even, odd, or no parity
Base UART	16C654
FIFO	64 bytes
Protocol configuration	Software programmable
Address / interrupt config.	Software programmable
Short protection	Continuous, all outputs
DIO lines	8 programmable digital I/O lines
Bus interface	PC/104 (ISA)
Power	+5VDC ±10%
Operating temp.	-40°C to +85°C (-40°F to +185°F)
Weight	2.5oz (71g)

# C-DB9M-4 ORDERING INFORMATION 8 configurable RS-232/422/485 serial port PC/104 module Quad serial port cable