

# Xtreme/104 Opto

## Applications

The Xtreme/104 Opto adapter offers two or four asynchronous RS-232 and/or RS-485/422 serial ports with optical isolation for data collection devices, barcode readers, time clocks, scales and other industrial automation equipment. The Xtreme/104 Opto adapter is an ideal industrial strength solution for control and automation applications requiring single node or multi-drop communications over short or long distances, and electrical isolation using PC/104 bus compatible computers.

## Features

- Two or four asynchronous RS-232, and/or RS-485/422 serial ports - each port's electrical interface is jumper selectable
- Each port is independently optically isolated to 1.0K VAC, peak to peak
- Supports data communications speeds up to 460.8 KBPS
- 16C2850 UARTs control each port providing 128 bytes of TxD/RxD FIFO buffers
- Supports three RS-485 modes:
  - Full Duplex
  - Half Duplex with auto TxD echo cancellation
  - Multi-drop Slave
- Each RS-485 transmitter and receiver has a jumper selectable 120 Ohm termination resistor
- Eight pre-defined sets of I/O addresses are jumper selectable.
- IRQ lines are jumper selectable. A choice of IRQ lines 3, 4, 5, 6, 7, 9/2, 10, 11, 12, 14, 15 is available and each Xtreme/104 board can be set to run on one, two, or four interrupts.
- Independent port configuration with baud rates from 50 BPS to 460.8 KBPS; data bits of 5, 6, 7 or 8; stop bits of 1, 1.5, or 2, and odd, even, or stick parity
- Optional DB9 male cables available
- Includes SeePORT, a full featured software data analyzer for Windows 95/98
- Easy installation comes with comprehensive manual and driver software

## Benefits

### High Speed, High Performance Communications

Achieve rapid data transfer rates up to 460.8 KBPS. State of the art 16C2850 quad UARTs with 128 bytes of TxD and RxD FIFO buffers offload interrupt handling and buffering from the main CPU, thus improving overall system performance.

### Hardware Reliability

Each port is independently optically isolated up to 1K VAC on all signals. This makes the Xtreme/104 Opto an excellent choice for mission critical applications that require highly reliable and rugged serial communications.

### Hardware Flexibility

The Xtreme/104 Opto offers hardware flexibility and adaptability for your application. You can configure each port's electrical interface, baud rate, parity, data and stop bits independently and various connector options are offered to suit your needs. The Xtreme/104 Opto supports three RS-485 modes: Full Duplex; Half Duplex with auto TxD echo cancellation, and Multi-drop Slave.

### Software Compatibility

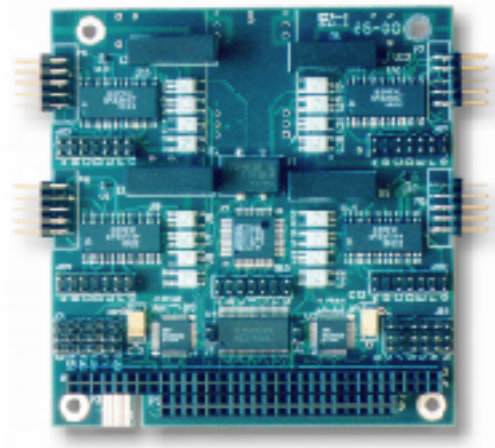
Because of its compatibility with standard PC serial ports, the Xtreme/104 Opto board supports all the most popular operating systems and communication software. For applications that do not support multi-port adapters, the Xtreme/104 Opto board comes with Linux, QNX, and Windows 95/98/NT 4.0/2000 driver software.

### Easy to Use

The Xtreme/104 Opto comes ready for simple installation. Included are board, Linux, QNX, and Windows 95/98/NT 4.0/2000 driver software and a comprehensive manual.

### Diagnostics Tools

The Xtreme/104 Opto adapter includes the Windows 95/98 software data line analyzer, SeePORT to help you diagnose communication problems and therefore minimize downtime.



## Warranty and Service

Connect Tech, an ISO 9001 registered company, has provided high performance communication solutions since 1985, building and testing products to meet high standards of quality and reliability. The Xtreme/104 Opto adapter comes with a one year warranty.

## Specifications

	Xtreme-2/104 Opto	Xtreme-4/104 Opto
Number of ports	2	4
Electrical Interface	RS-232 and/or RS-485/422 - each port's electrical interface is jumper selectable	
Optical Isolation	Each port individually isolated up to 1.0K VAC peak to peak	
Connectors	10 pin header connectors (optional DB9 male cables available)	
Control Signals	RS-232: RTS, CTS, TxD, RxD RS-485: TxD $\pm$ , RxD $\pm$ , CTS $\pm$ , RTS $\pm$	
Baud Rates	RS-232: 50 BPS – 230.4 KBPS RS-485: 50 BPS – 460.8 KBPS	
I/O Addresses	eight pre-defined sets of I/O addresses are jumper selectable - requires one set of eight addresses	
Interrupts	jumper selectable for IRQs 3, 4, 5, 6, 7, 9/2, 10, 11, 12, 14, 15	
UART Type	16C2850 quad UARTs c/w 128 byte TxD/RxD FIFO buffers	
Dimensions	Width: 9.60 cm Length: 10.41 cm (includes 10 pin headers) Height: 1.12 cm	
Power Requirements	+5 VDC @ 200mA (max) $\pm$ 5%	
Environmental Requirements	Temperature: (operating) 0° to 70° C (storage): -40° to 150° C Humidity: 95% non-condensing	
Bus	ISA bus compatible 16 bit PC/ 104 connector.	
Software Compatibility	DOS, Linux, QNX, and Windows 95/98/NT/2000 (contact Connect Tech for most current list)	
System Requirements	one available PC/104 module stack connector and hardware interrupt (if required)	

Part Numbers	Model
	<i>Please contact Connect Tech for more information about the Xtreme/104 Opto adapter</i>

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