

Blue Heat/PCI Opto

Applications

The Blue Heat/PCI 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 Blue Heat/PCI 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 PCI 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 1K VAC peak to peak
- Supports data communications speeds up to 921.6 Kbps
- 16C2850 UARTs control each port providing 128 bytes of Tx/D/RxD FIFO buffers
- Supports three RS-485 modes:
 - Full Duplex
 - Half Duplex with auto Tx/D echo cancellation
 - Multi-drop Slave
- Each RS-485 transmitter and receiver has a jumper selectable 120 Ohm termination resistor and also jumper selectable bias resistors
- Independent port configuration with baud rates from 50 bps to 921.6 Kbps, data bits of 5, 6, 7 or 8; stop bits of 1, 1.5, or 2, and odd, even, or stick parity
- Optional RJ-45 to DB-9 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 921.6 Kbps. State of the art 16C2850 quad UARTs with 128 bytes of Tx/D 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 peak to peak on all signals. This makes the Blue Heat/PCI Opto an excellent choice for mission critical applications that require highly reliable and rugged serial communications.

Hardware Flexibility

The Blue Heat/PCI 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 Blue Heat/PCI Opto supports three RS-485 modes: Full Duplex; Half Duplex with auto Tx/D echo cancellation, and Multi-drop Slave.

Software Compatibility

Blue Heat/PCI Opto boards offer compatibility with existing standard serial drivers for many of the most popular operating systems such as: Linux, QNX, SCO Unix, Solaris, Windows NT/2000 and Windows 95/98/Me/XP. This provides you with more software flexibility for your communication needs.

Easy to Use

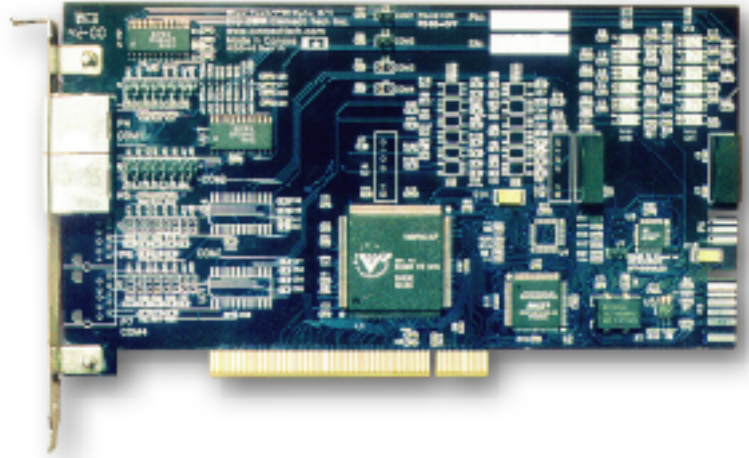
The Blue Heat/PCI Opto comes ready for simple installation. Included are board, driver software and a comprehensive manual.

Diagnostics Tools

Blue Heat/PCI Opto adapters include the Windows 95/98 software data line analyzer, SeePORT to help you diagnose communication problems and therefore minimize downtime.

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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. Blue Heat/PCI Opto adapters come with a one year warranty.

Specifications

	Blue Heat-2/PCI Opto Blue Heat-2/PCI Opto 485	Blue Heat-4/PCI Opto Blue Heat-4/PCI Opto 485
Number of ports	2	4
Electrical Interface	<i>Blue Heat/PCI Opto:</i> RS-232 and/or RS-485/422 - each port's electrical interface is jumper selectable <i>Blue Heat/PCI Opto 485:</i> RS-485 only	
Optical Isolation	Each port individually isolated up to 1K VAC peak to peak	
Connectors	On board RJ-45 connectors (optional RJ-45 to DB-9 male cables available)	
Control Signals	RS-232: RTS, CTS, Tx/D, RxD RS-485: Tx/D ±, RxD ±, CTS ±, RTS ±	
Baud Rates	RS-232: 50 bps - 230.4 Kbps RS-485: 50 bps - 921.6 Kbps	
I/O Addresses	Plug and Play resources require two 256 byte I/O spaces	
Interrupts	Plug and Play resources require one interrupt	
Memory Addresses	Plug and Play resources require a megabyte of memory address space	
UART Type	16C2850 quad UART c/w 128 byte Tx/D/RxD FIFO buffers	
Dimensions	Width: 10.60 cm Length: 19.50 cm (includes RJ45 connectors) Height: 1.12 cm	
Power Requirements	+5 VDC @ 320mA (typ.) ±5%	+5 VDC @ 500mA (typ.) ±5%
Environmental Requirements	Temperature: (operating) 0° to 70° C (storage): -40° to 150° C Humidity: 95% non-condensing	
Bus	33 MHz, 32 bit PCI with read/write FIFO buffers	
Regulatory Approvals	FCC Class A ICES-003; EN50082-1	EN55022 Class A EN61000-4
Software Compatibility	Linux, QNX, SCO Unix, Solaris, Windows NT/2000 and Windows 95/98/Me/XP (contact Connect Tech for most current list)	
System Requirements	One available 32 bit PCI slot and ISA bracket assembly	
Part Numbers	Model	
	<i>Please contact Connect Tech for more information about Blue Heat/PCI Opto adapters</i>	



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Quality and Reliability since 1985

