The HDLC-cPCIs is a four channel HDLC communications controller on a single CompactPCI-Serial 3U card. The HDLC-cPCIs uses a high performance, industry standard serial communication controller to provide 4 independent channels that can be configured for either HDLC-Synchronous or Asynchronous communication.

The HDLC-cPCIs has been designed for demanding transportation and industrial applications. All 4 ports feature galvanic isolation up to 2000V\textsubscript{RMS} and the card is available with an extended temperature operation range of $-40$ to $+85\degree C$.

The electrical interface of the 4 channels can be individually configured for RS-232, RS-422 or RS-485 operation. Each channel has independent receive and transmit FIFOs that facilitate high speed serial data rates.

The HDLC-cPCIs is a standard 3U CompactPCI-Serial module and supported for Linux and Windows.

**Rev A.00**
Subject to change without notification
HDLC-cPCIs

HDLC Communications Controller for CompactPCI-Serial

Applications

Serial protocol conversion
Mass-Transit / Transportation
Vending Machines
POS and ATM systems
Remote instrumentation
LAN Gateway or Bridge
Embedded WAN
Locomotive Communications
Designed for
Demanding
Transportation and
Industrial
Applications

HDLC-cPCIs
HDLC Communications Controller for CompactPCI-Serial

Features

4 channel concurrent operation
Individually configurable for HDLC / Asynchronous operation
2000Vrms galvanic isolation for each port
Selectable RS-232/422/485 electrical interface
Rugged, Locking I/O connectors
Extended temperature operation (-40°C to +85°C)
Communications Controller
32Bytes FIFO per channel
HDLC synchronous, Asynchronous operation

HDLC
HDLC protocol support
Wide range of serial encoding methods:
  - NRZ, NRZB, Biphase Mark (FM1), Biphase Space (FM0),
  - Biphase Level (Manchester),
  - Biphase Differential (Manchester Differential)
Up to 1MBit/sec multiple Ports (depends on host CPU)
Supporting differential TX-Data and RX-Data
Full-duplex operation
Abort Sequence generation and checking
Automatic zero bit insertion/deletion
Automatic flag insert

Asynchronous
Programmable baud rates up to 115200bps
Full-duplex operation
5, 6, 7, or 8 data bits per character
1, 1.5, or 2 stop bits
Odd or Even parity

Physical Interface
Independent RS-232/RS-422/RS-485 ports
2000Vrms galvanic isolation
Supporting TX-Data, RX-Data, CTS, RTS

Mechanical
Standard 3U CompactPCI-Serial form factor
Operating temp 0°C to +60°C
Operating temp -40°C to +85°C (extended temp)

Software Support
Drivers for Windows, Linux

Ordering Information
HDLC-cPCIs
4-port HDLC Controller (0 to 60°C)
HDLC-cPCIs-EXT
4-port HDLC Controller (-40 to 85°C)