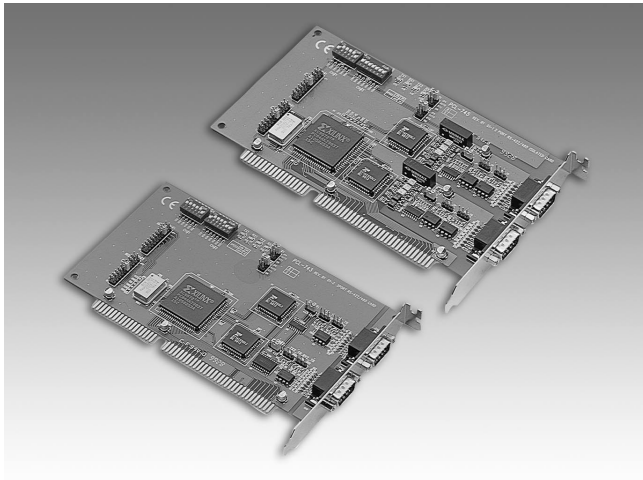


# PCL-743B/S

# PCL-745B/S

**2-port High-speed RS-422/485  
COMM Cards**

**2-port High-speed RS-422/485  
COMM Cards w/ Isolation**



## Features

- Two independent RS-422/485 serial ports
- Provides 3000 V<sub>DC</sub> isolation (PCL-745B/745S)
- Provides 2500 V<sub>DC</sub> surge protection (PCL-743S/745S)
- 16C550 UARTs with on-chip 16-byte FIFO
- Transmission speeds up to 921.6 Kbps
- I/O address and interrupt selectable
- Wide IRQ selection: 3, 4, 5, 6, 7, 9, 10, 11, 12 or 15
- Supports 2 wire or 4 wire operation
- Supports Tx, Rx, RTS, and CTS signals
- Automatic RS-485 data flow control or RTS control
- Termination resistors jumper enable/disable
- Space reserved for optional surge protection on data lines (PCL-743B/745B)
- Supports standard DOS COM1, COM2, COM3, and COM4
- Supports Windows 95/98/NT/ME/2000/XP, Linux (ICOM utility), DOS

## Introduction

The PCL-743/745 series cards provides two RS-422/485 serial ports. Each port utilizes a 16C550 UART with an on-chip 16-byte FIFO buffer for reliable, high-speed serial I/O.

The UART buffer divides data into 16-byte packets before sending them onto the bus. This drastically reduces the CPU load and avoids data loss due to failure to respond to the interrupt request in time. The UART is especially useful for high speed serial I/O under Windows.

The PCL-745B/745S card differs from the PCL-743B/743S card in that the former uses onboard optical isolators to protect your PC and equipment against damages from ground loops, increasing system reliability in harsh environments. To further increase reliability, the PCL-743S/745S offers surge protection technology, protecting your system from abrupt high voltage surges (up to 2500 V) such as those caused by lightning.

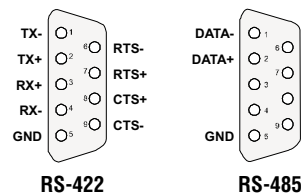
## Specifications

- Ports** 2
- UART** 2 x 16C550 with 16-byte FIFO
- Signal Support** TxD+, TxD-, RxD+, RxD-, CTS+, CTS-, RTS+ and RTS-
- I/O Address** From 200H to 3F8H
- IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12 or 15
- Isolation Voltage** 3000 V<sub>DC</sub> (PCL-745B/745S)
- Surge Protection** 2500 V<sub>DC</sub> (PCL-743S/745S)
- Power Consumption** +5 V @ 400 mA typical, 950 mA max.
- Connectors** Dual DB-9 male connectors
- Operating Temperature** 0 ~ 65° C (32 ~ 149° F)
- Dimensions** 185 x 100 mm (7.3" x 3.9")
- Shipping Weight** 0.6 kg (1.3 lbs)

## Ordering Information

- PCL-745B** 2-port RS-422/485 communication card with isolation protection
- PCL-745S** 2-port RS-422/485 communication card with isolation and surge protection
- PCL-743B** 2-port RS-422/485 communication card
- PCL-743S** 2-port RS-422/485 communication card with surge protection

## Pin Assignments



## Applications

- PLC monitoring and control
- Serial communication interface for harsh environments
- Data entry terminals
- Remote data acquisition and control systems
- Instrument controller and distributed control systems