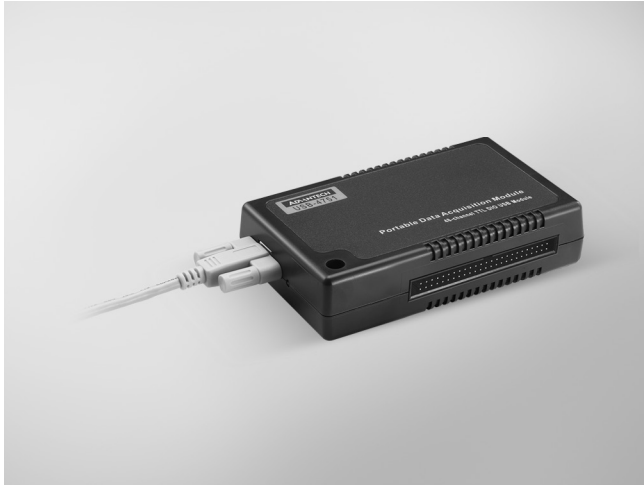# USB-4751
USB-4751L

48-ch Digital I/O USB Module

24-ch Digital I/O USB Module

Features

- Compatible with USB 1.1/2.0
- Portable
- Bus-powered
- 48/24 TTL digital I/O lines
- Emulates mode 0 of 8255 PPI
- Buffered circuits for higher driving capacity than the 8255
- Interrupt handling capability
- Timer/Counter interrupt capability
- Supports both dry and wet contact
- 50-pin Opto-22 compatible box header
- Suitable for DIN-rail mounting
- One lockable USB cable for secure connection included

CE FCC RoHS COMPLIANT 2002/95/EC

Introduction

The USB-4700 series consists of true Plug & Play data acquisition devices. No more opening up your computer chassis to install boards-just plug in the module, then get the data. It's easy and efficient. USB-4751/4751L is a 48/24-bit digital I/O module for the USB bus. Its 48/24 bits are divided into six/three 8-bit I/O ports and users can configure each port as input or output via software. USB-4751/USB-4751L also provides one event counter and three 16-bit timers, which can be cascaded to become a 32-bit timer.

Specifications

Digital Input

- **Channels**   USB-4751: 48 (shared with output)
                          USB-4751L: 24 (shared with output)
- **Compatibility**   5 V/TTL
- **Input Voltage**   Logic 0: 0.8 V max.
                          Logic 1: 2 V min.

Digital Output

- **Channels**   USB-4751: 48 (shared with input)
                          USB-4751L: 24 (shared with input)
- **Compatibility**   5 V/TTL
- **Output Voltage**   Logic 0: 0.5 V max.
                          Logic 1: 3.8 V min.
- **Output Capability**   Sink: 12 mA @ 0.5 V
                          Source: 12 mA @ 3.8 V for single channels
                                  5 mA @ 3.8 V for all channels in high status

Counter/Timer

- **Channels**   2
- **Resolution**   32-bit
- **Max. Input Frequency** 10 MHz

General

- **Bus Type**   USB 1.1/2.0
- **I/O Connector**   50-pin box headers, pin assignments are fully compatible with Opto-22 I/O module racks
- **Dimensions (L x W x H)** 132 x 80 x 32 mm (5.2" x 3.15" x 1.26")
- **Power Consumption**   Typical: 5 V @ 200 mA
                          Max.: 5 V @ 500 mA
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F) (refer to IEC 68-2-1, 2)
- **Storage Temperature** -20 ~ 70° C (-4 ~ 158° F)
- **Storage Humidity**   5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)

Ordering Information

- **USB-4751-AE**   48-ch Digital I/O USB Module
- **USB-4751L-AE**   24-ch Digital I/O USB Module

Accessories

- **1960004544**   Wallmount Bracket
- **1960005788**   VESA Mount Bracket
- **PCL-10150-1.2E**   50-pin Flat Cable, 1.2 m
- **ADAM-3950-AE**   50-pin DIN-rail Flat Cable Wiring Board
- **PCLD-782B-AE**   24-ch IDI Board w/ 20-pin & 50-pin Flat Cables
- **PCLD-785B-AE**   24-ch Relay Board w/ 20- pin & 50-pin Flat Cables