

# 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 x TTL digital I/O
- 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
- 1 x Lockable USB cable included for connection security

### Introduction

The USB-4700 series comprises plug-and-play DAQ modules that can be installed without opening the chassis; simply plug in the modules to access collected data. Reliable and rugged enough for industrial applications, yet affordable for home systems, USB-4700 series modules provide easy and efficient means of adding sensing and control capabilities to USB-capable computers.

USB-4751 and USB-4751L are 48/24-bit digital I/O modules that feature USB interface, event counter, and 2-channel 32-bit counters. The 48/24 bits are divided into six/three 8-bit I/O ports that can be individually configured as input or output ports via software.

### 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 channel  
20mA summed by port (8-channel summed)

#### Counter/Timer

- **Channels** 2
- **Resolution** 32-bit
- **Max. Input Frequency** 10MHz
- **Supported counter functions** Event counting, frequency measurement, Timer/pulse, pulse width modulation (PWM output)\*

#### 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 @ 100 mA  
Max.: 5 V @ 500 mA
- **Operating Temperature** 0 ~ 60 °C (32 ~ 140 °F)
- **Storage Temperature** -20 ~ 70 °C (-4 ~ 158 °F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing

### Ordering Information

- **USB-4751-BE** 48-ch digital I/O USB module
- **USB-4751L-BE** 24-ch digital I/O USB module

#### Accessories

- **1960004544** Wall mount 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

\* For detail specification of counter functions, please refer to the user manual.