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
- Emulates Mode 0 of the Intel® 8255 PPI chip
- Buffered circuits offer a higher driving capacity compared to the Intel® 8255 PPI chip
- 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 sufficiently affordable for home systems, USB-4700 series modules provide an easy and efficient means of adding measurement and control capabilities to USB-capable computers.

USB-4751 and USB-4751L are 48/24-bit digital I/O modules that feature a USB interface, event counter, and three 16-bit timers, which can be cascaded to provide a 32-bit timer. The 48/24 bits are divided into six/three 8-bit I/O ports that can be individually configured as input or output ports using 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 channels
  5 mA @ 3.8 V for all channels in high status

Counter/Timer

- **Channels** 2
- **Resolution** 32-bit
- **Max. Input Frequency** 8 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)
- **Storage Temperature** -20 ~ 70 °C (-4 ~ 158 °F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing

Ordering Information

- **USB-4751-AE** 48-ch digital I/O USB module
- **USB-4751L-AE** 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
- **PCLD-782B-AE** 24-ch IDI board with 20-pin and 50-pin flat cables
- **PCLD-785B-AE** 24-ch relay board with 20-pin and 50-pin flat cables

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