USB-4751
USB-4751L

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**: 24-ch IDI board with 20-pin and 50-pin flat cables
- **PCLD-782B-AE**: 24-ch relay board with 20-pin and 50-pin flat cables

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**

RoHS COMPLIANT
2002/95/EC

Last updated: 27-Jun-2018
All product specifications are subject to change without notice.