USB-4761

8-ch Relay, 8-ch Isolated D/I USB Module



Features

- Supports USB 2.0
- Portable
- No need for the external power
- 8 relay output channels and 8 isolated digital input channels
- LED indicators to show activated relays
- 8 Form C type relay output channels
- High-voltage isolation on input channels (2,500 V_{DC})
- High ESD protection (2,000 V_{DC})
- Wide input range (5 ~ 30 V_{DC})
- Interrupt handling capability
- · Wiring terminal on Modules

Introduction

The USB-4761 is a relay actuator and isolated D/I module for USB bus. It provides 8 optically-isolated digital inputs with isolation protection of $2,500\,V_{DC}$ for collecting digital inputs in noisy environments and 8 relay actuators for serving as on/off control devices or small power switches. For easy monitoring, each relay is equipped with one red LED to show its on/off status. The USB-4761's eight optically-isolated digital input channels are ideal for digital input in noisy environments or with floating potentials.

Rugged Protection

The USB-4761 digital input channels feature a rugged isolation protection for industrial, lab and machinery automation applications. It durably withstands voltage up to 2,500 V_{DC} , protecting your host system from any incidental harms. If connected to an external input source with surge-protection, the USB-4761 can offer up to a maximum of 2,000 V_{DC} ESD (Electrostatic Discharge) protection.

Specifications

Isolated Digital Input

Channels

Input Voltage
 Logic 0: 2 V max.
 Logic 1: 10 V (30 V max.)

Isolation Protection 2,500 V_{DC}
 Opto-Isolator Response 25 µs
 Input Current 30 V_{DC}/1 A

Relay Output

- Channels 8

• Relay Type SPDT (8 x Form C)

- Contact Rating $250~V_{AC} @ 3~A, or 24~V_{DC} @ 3~A$

 $\begin{array}{lll} \bullet & \textbf{Relay on Time} & 15 \text{ ms max.} \\ \bullet & \textbf{Relay off Time} & 5 \text{ ms max.} \\ \bullet & \textbf{Life Span} & 2 \times 10^{7} \\ \bullet & \textbf{Resistance} & \textbf{Contact: 50 M} \Omega \\ \end{array}$

Insulation: 1 G Ω min. (at 500 V_{pc})

General

• Bus Type USB 2.0

 I/O Connectors
 Dimensions (L x W x H) 132 x 80 x 32 mm
 Power Consumption
 Typical: +5 V @ 60 mA Max: +5 V @ 400 mA

• Operating Temperature $0 \sim 60^{\circ} \text{ C} (32 \sim 140^{\circ} \text{ F}) (IEC 68-2-1, 2)$

• Storing Temperature $-20 \sim 70^{\circ} \text{ C } (-4 \sim 158^{\circ} \text{ F})$

• Storing Humidity 5 ~ 95 % RH, non-condensing (IEC 68-2-3)

Ordering Information

• **USB-4761** 8-ch Relay, 8-ch Isolated D/I USB Module

Software

IPPC B

FPM

ATM & AWS

DA&C

CPCI
ADAM-3000

Motion Control

ICOM

Industrial Networking

ADAM-4000

ADAM-5000

ADAM-6000

ADAM-8000