



USB-2064

USB I/O Module with 8-ch Power Relay



USB-2064-16

USB I/O Module with 16-ch Power Relay

Features

- 8/16-ch power relay output
- 5A maximum current contact rating for USB-2064
- Safety functionality when communication failed
- Wide operating temperature range
- 3000 VDC Intra-Module isolation for USB-2064-16
- USB 2.0 Full-Speed (12Mbps)
- USB Bus Powered
- Plug-and-Play without driver
- Lockable USB cable
- PWR / RUN / ERR LED indicators



Introduction

The USB-2064 and USB-2064-16 are full-speed USB device with 8-ch or 16-ch power relay output module, and offers features for industrial control and manufacturing test applications, such as factory automation or embedded machine control. The USB-2064/USB-2064-16 provides a power rated relay with 5A/3A maximum current contact rating for switching. Besides, the USB-2064/USB-2064-16 also features power-on value to customize the initial state. Moreover, the safety value can be used to secure the devices in the field. With the true Plug & Play capability, it needs not opening up your computer chassis to install boards-just plug in the module, then get or set the data. Owing to another USB feature known as "hot-swapping", users do not even need to shut down and restart the system to attach or remove the USB-2064/USB-2064-16.

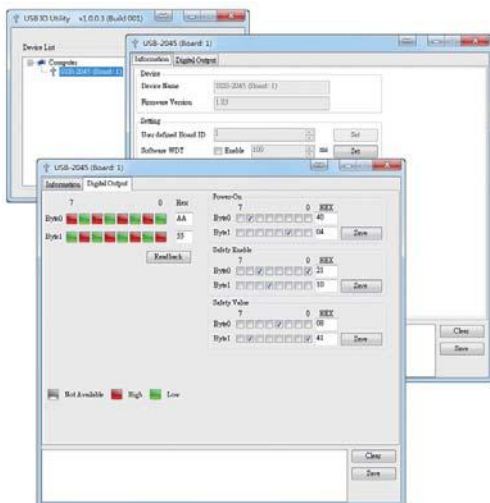
The USB I/O utility can help users to configure and test USB-2064/USB-2064-16 quickly and easily without programming; In addition, we also provide the friendly API library and demos for users to develop own USB application with various application development tools (VB / C++ / C#.NET / VB.NET). Therefore, the USB-2064/USB-2064-16 is the perfect way to add control capability to any USB capable computer.

Software

USB I/O Utility

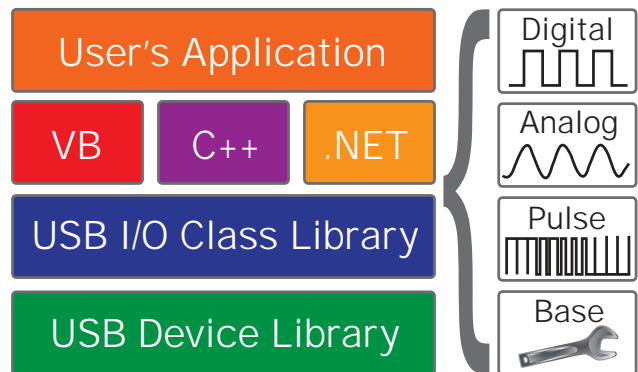
USB I/O Utility provides a simple way to easily test and instant acquire data for all ICP DAS USB I/O series modules without programming.

- Automatically scan all ICP DAS USB I/O modules
- Easily and quickly configure and test USB I/O modules
- Completely and precisely log I/O data for analysis



VB/C++/C#.NET/VB.NET SDK

ICP DAS provides a SDK for USB I/O modules to help user to develop own project easily and quickly. The SDK can be supported in VB/C++/C#.NET/VB.NET to fulfill project development.



Applications

- Building automation
- Factory automation
- Machine automation
- Testing equipment

System Specifications

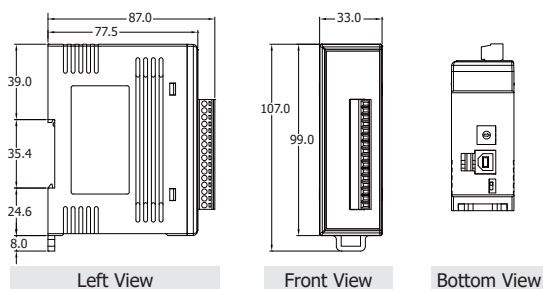
Model	USB-2064	USB-2064-16
USB		
Specification	USB 2.0 Full-Speed (12Mbps)	
CPU Module		
Watchdog Timer	1 Hardware watchdog (1.6 second) 1 Software watchdog (Programmable)	
Isolation		
Intra-module Isolation	-	3000 VDC
EMS Protection		
ESD (IEC 61000-4-2)	4 kV contact for each terminal 8 kV air for random point	
LED Indicators		
Status	3 x Power and Communication 8 x Power Relay 16 x Power Relay	
Power		
Consumption	1.4 W	2.3 W (Max.)
Mechanical		
Dimensions (mm) (W x L x H)	33 x 107 x 87	31 x 147 x 126
Environmental		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-40 ~ +85 °C	
Humidity	10 ~ 95% RH, Non-condensing	

I/O Specifications

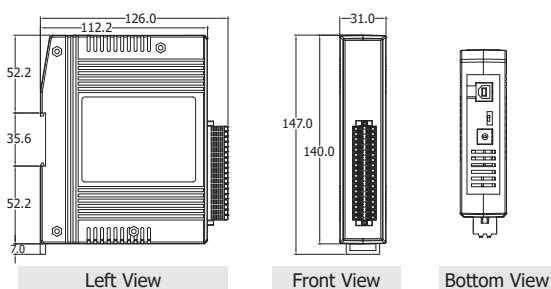
Model	USB-2064	USB-2064-16
Relay Output		
Channels	8 x Form A (SPST-NO)	16 Form A (SPST-NO)
Contact Rating	5 A @ 250 VAC (47 ~ 63 Hz) 5 A @ 30 VDC	3 A @ 250 VAC (47 ~ 63 Hz) 3 A @ 30 VDC
Operate Time	10 ms (Max.)	
Release Time	5 ms (Max.)	
Electrical Endurance	1 x 10 ⁵ ops	
Mechanical Endurance	2 x 10 ⁷ ops	
Surge Strength	Between Open Contact: 1000 VAC (1 Min.) Between Coil and Contacts: 3000 VAC (1 Min.)	
Power on Value	-	Yes, Programmable
Safe Value	-	Yes, Programmable

Dimensions (Units: mm)

USB-2064

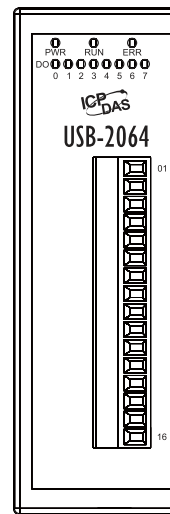


USB-2064-16



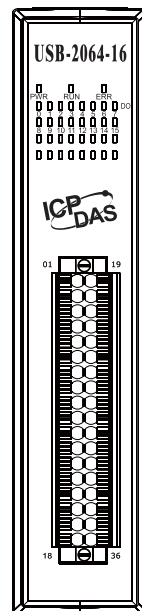
Pin Assignments

USB-2064



Pin Assignment	Terminal No.
RL0 NO	01
RL0 COM	02
RL1 NO	03
RL1 COM	04
RL2 NO	05
RL2 COM	06
RL3 NO	07
RL3 COM	08
RL4 NO	09
RL4 COM	10
RL5 NO	11
RL5 COM	12
RL6 NO	13
RL6 COM	14
RL7 NO	15
RL7 COM	16

USB-2064-16



Pin Assignment	Terminal No.	Pin Assignment
NO0	01	19 COM0
NO1	02	20 COM1
NO2	03	21 COM2
NO3	04	22 COM3
NO4	05	23 COM4
NO5	06	24 COM5
NO6	07	25 COM6
NO7	08	26 COM7
N/A	09	27 N/A
N/A	10	28 N/A
NO8	11	29 COM8
NO9	12	30 COM9
NO10	13	31 COM10
NO11	14	32 COM11
NO12	15	33 COM12
NO13	16	34 COM13
NO14	17	35 COM14
NO15	18	36 COM15

Wire Connections

Output	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Relay Contact		

Ordering Information

USB-2064 CR	USB I/O Module with 8-ch Power Relay (RoHS) Includes CA-USB15 Cable (USB 2.0 A-Male to B-Male Cable, w/Ferrite Core, 1.5 M)
USB-2064-16 CR	USB I/O Module with 16-ch Power Relay (RoHS) Includes CA-USB15 Cable (USB 2.0 A-Male to B-Male Cable, w/Ferrite Core, 1.5 M)