USB-2026

5-channel Analog Input, 2-channel Analog Output,
2-channel Digital Input and 2-channel Digital Output Module

~ NEW ~

Model: USB-2026

Features

- Multifunction (5 AI, 2 AO, 2DI and 2 DO)
- Overload and Short Circuit Protection for Digital Output
- 240 Vrms Overvoltage Protection for Voltage Input
- 4kV ESD protection
- Wide Operating Temperature Range
- 3000 VDC Intra-Module Isolation
- USB 2.0 Full-Speed
- USB Bus Powered
- Lockable USB cable
- Driver Free
- CE FC RoHS

Introduction

The USB-2026 is a multifunction module that includes 5 analog input channels, 2 analog output channels, 2 digital input channels, 2 digital output channels and compatibles with USB 2.0 full-speed. It equips small size, portable, USB bus powered, various input type features to help user build up own project easily and quickly. Compare with traditional PC I/O card, it is waste of time to open chassis and configure I/O board. In ICP DAS USB I/O, you will enjoy the simply controlling I/O in the efficient way. ICP DAS USB I/O equips USB bus powered feature, one cable to access I/O and provide power without additional power wiring. ICP DAS USB I/O is a small size module. You can use these I/O modules in wide range application, ex: fan-less control or measurement, automatically testing with BOX-PC...etc. ICP DAS USB I/O provides 10kS/s data acquisition functionality. User can apply this to real-time demanded application, ex: noise measurement.

The USB-2026 provides a programmable input range on all analog input (+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA or 0 ~ +20 mA), analog outputs are 12-bit at +/-5 V, +/-10 V, 0 ~ +20 mA or +4 ~ +20 mA and all digital outputs can be set as alarm output. Each analog input can be configured for an individual range and provides a high overvoltage protection of 240 Vrms.

Applications

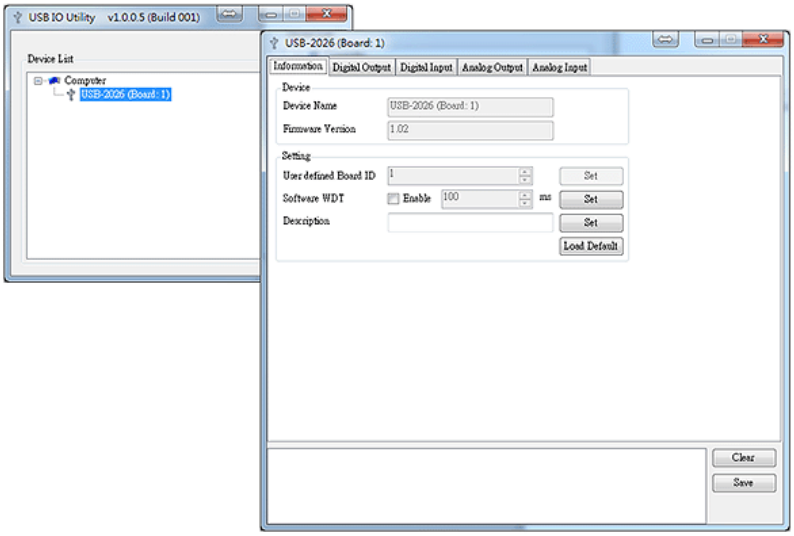
- Automation
- Measurement and testing
- Laboratory research

Software

USB-2K Utility

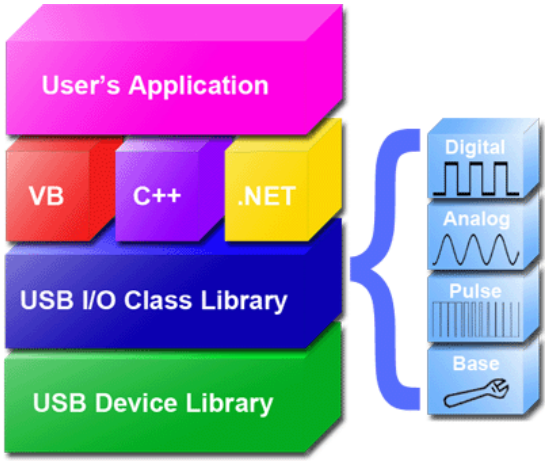
USB-2K Utility provides a simple way to easily test and instant acquire data for all ICP DAS USB IO series modules without programming.

- USB module configuration
- I/O configuration
- Log Data analysis
- Easy to test



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.



Specifications

Analog Input		
Channels		5 Differential
Input Type		Voltage: ±1 V, ±2.5 V, ±5 V, ±10 V
		Current: ±20 mA, 0 ~ 20 mA, 4 ~ 20 mA
Resolution	Normal Mode	14 bit
	Fast Mode	12-bit
Sampling Rate	Normal Mode	10 Hz total
	Fast Mode	200 Hz total
Accuracy	Normal Mode	±0.1% FSR
	Fast Mode	±0.5 % FSR
Zero Drift		±20 μV/°C
Span Drift		±25 ppm/°C
Input Impedance		Voltage: 20 MΩ
		Current: 135 Ω
Overvoltage Protection		Voltage: 120 VDC
		Current: N/A
Overcurrent Protection		Voltage: N/A
		Current: Yes, 50 mA at 110 VDC
Analog Output		
Channels		2
Range (Jumper Selectable)		Voltage: +0~+5 VDC, +0~+10 VDC, ±5 VDC, ±10 VDC
		Current: +0~+20 mA, +4~+20 mA
Resolution		12-bit
Accuracy		±0.1% of FSR
Output Capacity Voltage Output Capability		10 V @ 20 mA
Open Wire Detection		Yes, for 4 ~ 20 mA only
Power On Value		Yes
Safety Value		Yes
Digital Input		

Channel		2
Type		Dry Contact (Source)
On Voltage Level		Close to GND
Off Voltage Level		Open
Input Impedance		10 KΩ, 0.5 W
Counters	Channels	2
	Max. Count	4,294,967,285 (32-bit)
	Max. Input Frequency	100 Hz
	Min. Plus Width	10 ms
Overvoltage Protection		±57 VDC
Digital Output		
Channels		2
Type		Isolation Open Collector (Sink)
Max. Load Current		700mA/Channel
Load Voltage		+3.5 ~ 50 VDC
Overvoltage Protection		±60 VDC
Overload Protection		1.4 A (with short-circuit protection)
Short Circuit Protection		Yes
Power-on Value		Yes, Programmable
Safe Value		Yes, Programmable
Communication		
Interface		USB 2.0 Full-Speed
Watchdog		1 Hardware watchdog (1.6 second)
		1 Software watchdog (Programmable)
LED Indicators		
System LED Indicators		3 LED as Power, Run and Error
EMS Protection		
ESD (IEC 61000-4-2)		4 kV contact for each terminal
		8 kV air for random point
Mechanical		
Dimensions (W x L x H)		33 mm × 78 mm × 107 mm
Environmental		
Operating Temperature		-25 ~ +75 °C
Storage Temperature		-40 ~ +85 °C
Humidity		10 ~ 95% RH, non-condensing

Ordering Information

USB-2026	5-channel Analog Input, 2-channel Analog Output, 2-channel Digital Input and 2-channel Digital Output Module	**Art. Nr. 145864**