

# NISKDIO-8I8O

8-Channels Isolated Digital I/O with mini-PCIe Interface



## Main Features

- mini-PCIe full size form factor (dimension: 51 x 30mm) revision 1.2 compliant
- Support adjustable input filter (10 $\mu$ s/1ms/3.2ms/10ms)
- Fast output response time (within 150 $\mu$ sec)
- High over-voltage-protection (47 VDC) and voltage isolation (500 VDC)
- High source current on isolated output channels (200mA/channel)
- Support factory automation system PC applications (NIFE/NISE)
- Support -20~60 degree C operating temperature
- Provide NEXCOM Xcare™ utility 3.1 for NISK-DIO configuration & programming
- Support Microsoft Windows 7/8.1

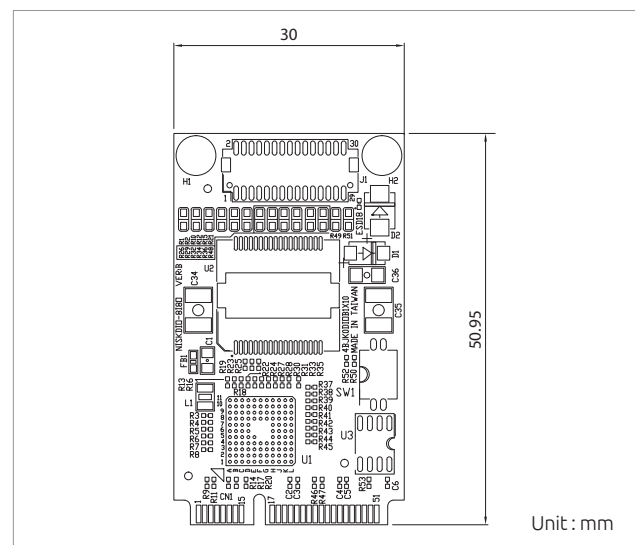
## Product Overview

The NISK-DIO includes 8 channels of high-power MOSFET outputs with a 30VDC capability and 8 channels isolated digital inputs, 47V high-voltage protection and easy configuration and efficient programming of the software Xcare™ utility 3.1. For fast output response time and remove noise or chattering signal by adjustable input filter. The NISK-DIO is for industrial applications where factory automation system PC best choice.

## Specifications

Isolated Digital Input	
Channels	8
Input OFF Voltage	0~7 VDC max
Input ON Voltage	11~24 VDC max
Input Format	Galvanic isolation input
Response Time	10 $\mu$ sec
Input Filter	10 $\mu$ s/1ms/3.2ms/10ms, select by switch, default 1ms
Isolated Digital Output	
Channels	8
Output Voltage	12~30 VDC
Output Current	200 mA max per channel
Output Format	Galvanic isolation output
Response Time	150 $\mu$ sec
General Specification	
Connector	1 x D-Sub 26pin female connector
Isolation Protection	500 VDC
External Power Supply	24 VDC ( $\pm$ 10%)
Operating Temperature	-20°C to 60°C
Storage Temperature	-40°C to 85°C Relative humidity: 5% to 95% (non-condensing)
Dimensions	Full size mini-PCIe type: 51mm (W) x 30mm (D) x 1mm (H)
Certifications	CE approved (EN55022, EN55024) FCC Class A
OS Support	Microsoft® Windows® 7/8.1
Software	Tools & driver: Xcare™ 3.1 tools & API drivers

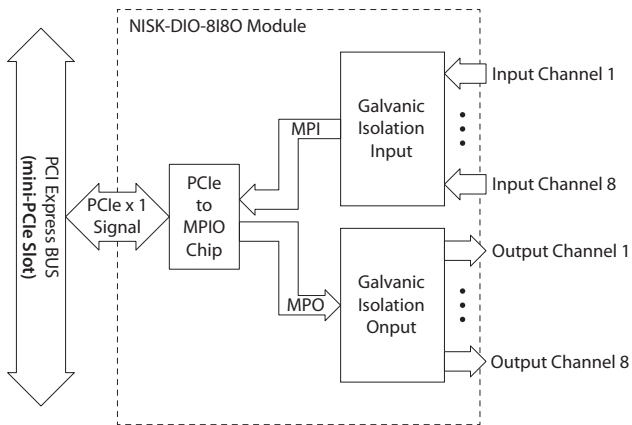
## Dimension Drawing



## Ordering Information

- **NISKDIO-8I8O (P/N: 10JK00DIO00X0)**  
Digital 8-CH input/8-CH output with cable and bracket

## Block Diagram

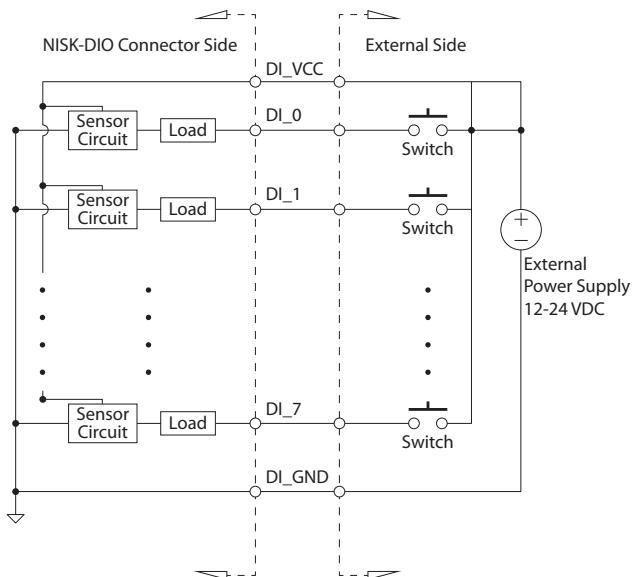


## Connector Pin Assignment

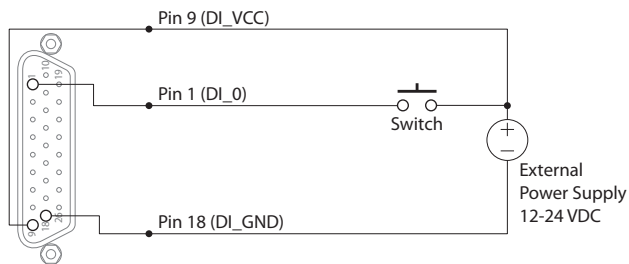
Pin Definition						
	Pin No.	Definition	Pin No.	Definition	Pin No.	Definition
	1	DI_0	10	DO_0	19	DO_VCC
	2	DI_1	11	DO_1	20	DO_VCC
	3	DI_2	12	DO_2	21	DO_VCC
	4	DI_3	13	DO_3	22	DO_VCC
	5	DI_4	14	DO_4	23	DO_GND
	6	DI_5	15	DO_5	24	DO_GND
	7	DI_6	16	DO_6	25	DO_GND
	8	DI_7	17	DO_7	26	DO_GND
	9	DI_VCC	18	DI_GND		

## Connect Digital Input Signal

(Sink Type)

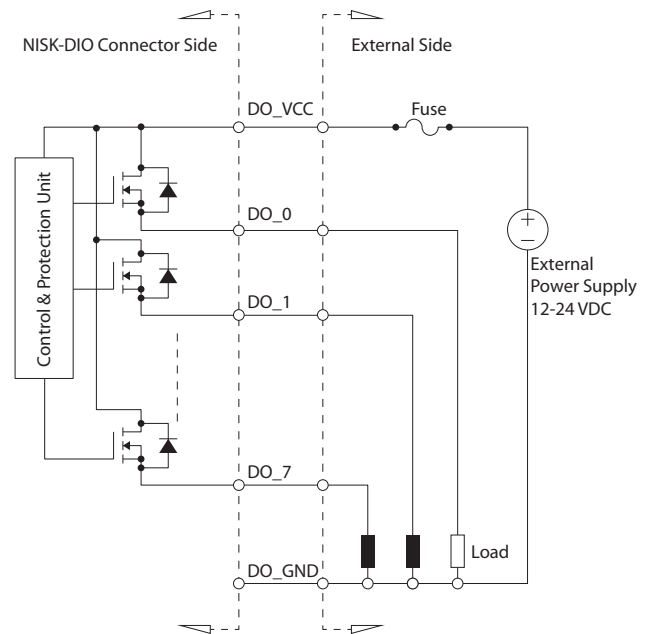


### Device Connect Example – Switch

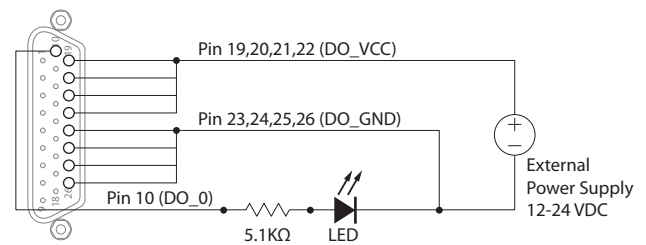


## Connect Digital Output Signal

(Source Type)



### Device Connect Example - LED



\* Suggest to connect all "DO\_VCC" pin with power source to provide sufficient current.