

# PISO-730/730A

32-channel isolated DI/O & 32-channel TTL DI/O board



PISO-730



PISO-730A

## Functional Description

The PISO-730/730A provides 32-channel isolated digital I/O and 32-channel TTL-level digital I/O. Each of the 16 isolated digital output channel equipped a Darlington transistor (PISO-730) or PNP transistor (PISO-730A). The board can interface to field digital logic signals to eliminate ground-loop problems and isolate the host PC from damaging voltages.

## Applications

- Factory Automation
- Product Test
- Laboratory Automation

## Specifications

### 16 Optical-Isolated Inputs

- Type: isolated current input
- Input voltage: 5V to 24VDC
- Input impedance: 1.2KΩ, 0.5W
- Response time: 4KHz max

### 16 TTL-level Inputs

- Input high voltage: 2.0V min
- Input low voltage: 0.8V max
- Response time: 30KHz typical

### 16 Isolated Digital Outputs

- Output voltage:
  - open-collector 5~30VDC (PISO-730)
  - open-collector 10~30VDC (PISO-730A)
- Sink current: 100 mA/channel, 200 mA max
- Source current: 100 mA/channel
- Response time: 30KHz max

### 16 TTL-level Outputs

- High: Source 0.4 mA at 2.4V min
- Low: Sink 8 mA at 0.5V max

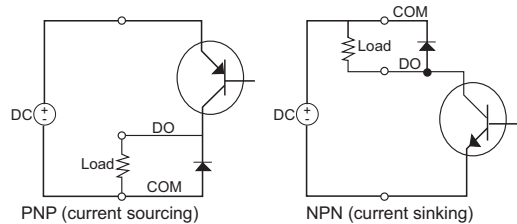
## Features

- 16-channel isolated digital input and 16-channel isolated open-collector output
- 16-channel TTL input and 16-channel TTL output
- Built-in DC/DC converter built-in
- 2500VDC isolated voltage (PISO-730)
- 3750VDC isolated voltage (PISO-730A)
- Sink current output (PISO-730)
- Source current output (PISO-730A)

## General Specifications

- I/O connector: one 37-pin D-sub female  
two 20-pin ribbon male
- Power requirements: +5V @ 640 mA
- Operating temperature: 0 ~ 60°C
- Operating humidity: 0 ~ 90% non-condensing
- Storage temperature: -20 ~ 70°C
- Dimensions: 180 mm x 105 mm

## Sinking and Sourcing circuit



## Pin Assignment

CON1				CON2				CON3			
IDO15	37	19	EO.COM2	+12V	20	19	+5V				
IDO13	36	18	IDO14	D.GND	18	17	D.GND				
IDO11	35	17	IDO12	DI 15	16	15	DI 14				
IDO9	34	16	IDO10	DI 13	14	13	DI 12				
IDO7	33	15	IDO8	DI 11	12	11	DI 10				
IDO5	32	14	IDO6	DI 9	10	9	DI 8				
IDO3	31	13	IDO4	DI 7	8	7	DI 6				
IDO1	30	12	IDO2	DI 5	6	5	DI 4				
EO.GND	29	11	IDO0	DI 3	4	3	DI 2				
EI.COM2	28	10	EO.COM1	DI 1	2	1	DI 0				
IDI15	27	9	EI.COM1								
IDI13	26	8	IDI14	+12V	20	19	+5V				
IDI11	25	7	IDI12	D.GND	18	17	D.GND				
IDI9	24	6	IDI10	DO 15	16	15	DO 14				
IDI7	23	5	IDI8	DO 13	14	13	DO 12				
IDI5	22	4	IDI6	DO 11	12	11	DO 10				
IDI3	21	3	IDI4	DO 9	10	9	DO 8				
IDI1	20	2	IDI2	DO 7	8	7	DO 6				
		1	IDI0	DO 5	6	5	DO 4				
				DO 3	4	3	DO 2				
				DO 1	2	1	DO 0				

## Ordering Information

### Standard

- PISO-730:** 32-channel isolated digital I/O & 32-channel TTL digital I/O board. (current sinking)
- PISO-730A:** 32-channel isolated digital I/O & 32-channel TTL digital I/O board. (current sourcing)

### Optional

- DN-37:** Two 37-pin connector DIN-rail mounting terminal board
- DB-37:** 37-pin D-sub directly connector terminal board
- DN-20:** Two 20-pin header DIN-rail terminal board
- DB-16P:** 16-channel isolated DI/O board
- DB-16R:** 16-channel relay board
- ADP-20/PCI:** 20-pin extender