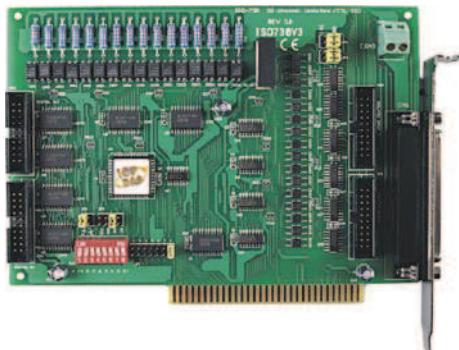


# ISO-730

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



## Functional Description

The ISO-730 has 32 isolated digital I/O channels and 32 TTL digital I/O channels. Each of the 16 isolated digital input channel accepts voltage from 5V to 24V and has a resistance of  $1.2K\Omega$ . Each of the 16 isolated digital output channels equipped a Darlington transistor. The board can interface to field logic signals to eliminate ground-loop problems and isolate the host computer from damaging voltages. It is compatible to PCL-730.

## Applications

- Factory Automation
- Product Test
- Laboratory Automation

## Specifications

### 16 Optical-Isolated Inputs

- Type: Isolated current input
- Isolation voltage: 2500VDC
- Input voltage: 5V to 30VDC
- Input impedance:  $1.2K\Omega$ , 0.5W
- Response time: 10KHz max

### 16 TTL-level Inputs

- Input high voltage: 2.0V min
- Input low voltage: 0.8V max
- Input load: High: 0.05 mA max @ 2.7V  
Low: 0.4 mA max @ 0.5V
- Response time :30KHz typical

### 16 Optical-Isolated Outputs

- Output voltage: open collector 30V max
- Isolation voltage: 2,500VDC
- Sink current: 100 mA/channel
- Response time: 10KHz max

### 16 TTL-level Outputs

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

## Features

- 16 isolated digital inputs, 16 isolated open-collector output
- 16 TTL input and 16 TTL output
- Sink current up to 200 mA on each isolated output
- Built-in DC/DC converter
- 2500VDC isolation voltage
- Two interrupt source:
  - Channel 0 and 1 of isolated DI port
  - Channel 0 and 1 of TTL DI port

## General Environmental

- I/O connector: one 37-pin D-Sub female  
four 20-pin ribbon male
- Power requirements: +5V @ 764 mA
- Operating temperature: 0 ~ 60°C
- Operating humidity: 0 ~ 90% non-condensing
- Storage temperature: -20 ~ 70°C
- Dimensions: 172 mm x 124 mm

## Pin Assignment

CN3		CN6	
DO 0	1	DO 1	20
DO 2	3	IDI_0	IDI_1
DO 4	5	IDI_2	IDI_3
DO 6	7	IDI_4	IDI_5
DO 8	9	IDI_6	IDI_7
DO10	11	IDI_8	IDI_9
DO12	13	IDI_10	IDI_11
DO14	15	IDI_12	IDI_13
D.GND	17	IDI_14	IDI_15
+5V	19	E1.COM1	E1.COM2
		EO.COM1	EO.GND
		IDO_0	IDO_1
		IDO_2	IDO_3
		IDO_4	IDO_5
		IDO_6	IDO_7
		IDO_8	IDO_9
		IDO_10	IDO_11
		IDO_12	IDO_13
		IDO_14	IDO_15
		E0.COM2	EO.DIO
		19	20
		+12V	+12V

CN4			
DI 0	1	DI 1	DI 0
DI 2	3	DI 3	DI 2
DI 4	5	DI 5	DI 4
DI 6	7	DI 7	DI 6
DI 8	9	DI 9	DI 8
DI 10	11	DI 11	DI 10
DI 12	13	DI 13	DI 12
DI 14	15	DI 15	DI 14
D.GND	17	D.GND	D.GND
+5V	19	+12V	+12V

## Ordering Information Standard

**ISO-730:** 32-channel isolated digital I/O & 32-channel TTL digital I/O board

### 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 D/I board
- DB-16R:** 16-channel relay board
- ADP-20:** 20-pin extender