

DB-24P / DB-24PD

24-channel OPTO-Isolated Input Board



Manual



Certification

Model: DB-24P / DB-24PD

Functional Description

The DB-24P is a 24 channel isolated digital input daughter board for DIO24,DIO48,DIO144 ,PIO-D144,OPTO-22 Compatible digital input board or any 722,724, digital input board . The optically isolated inputs of the DB-24P consist of a bi-directional opto-couple with a resistor for current sensing . You can use the DB-24P to sense DC signal from TTL levels up to 24V. You can also use DB-24P to sense a wide range of AC signals. The DB-24 P registers a constant logic high if the frequency of the input AC signal is greater or equal to 1 kHz, and if the voltage of the AC signal is at least 4Vrms . If you are using AC input signal ,you must short the AC filter Jumper. You can use the board to isolate the computer from large common-mode voltages ,ground loops, and voltage spikes that often occur in industrial environments.

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Features

- Optically isolated digital input channels
- Connects directly to DIO24,DIO48,DIO144 OPTO-22 compatible digital input card or any 722,724 OPTO-22 compatible digital input board.
- AC/DC Signal Input
- AC Signal Input with filter
- Input buffer with voltage comparators
- Isolated digital input sensing

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Specifications

- I/O connector Electrical Specifications
- Configuration : 24 optically isolated digital input channels
- Compatibility : TTL compatible
- Digital Input
- Number of channels : 24,each with its own ground reference isolated from other channels
- Maximum input voltage :24 VDC or 24 VAC
- Digital Logic Level

LEVEL	Minimum	Maximum
Input low voltage (DC or peak AC)	0	+/-1V
Input high voltage DC /1kHz AC	+/-2.8VDC, 4Vrms	+/-24VDC, 24VAC

- Input impedance : 1.2k
- Source Current:

5V inputs : 4mA/channel minimum
24V inputs : 20mA/channel minimum

- Response Time :20us without filter / 2.2ms with filter
- Power Supplies : +5v :336mA/maximum
- Board Dimension : 213mm x 132mm
- Operating Temperature : 0 -60°C
- Storage Temperature : -20~70°C
- Humidity : 5% to 90 % noncondensing

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Applications

- On/off control
- Energy management
- Test Automation
- Process Control

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Ordering information

DB-24P	24-channel OPTO-22 compatible Opto-isolated Input Board Include : CA-5015 (50-pin Flat Cable 1.5m)
DB-24PD	24-channel Opto-isolated Input Board Include : CA-3710 (37-pin D-sub Cable 1.5m)
DB-24P/DIN	DB-24P with DIN-Rail Mounting
DB-24PD/DIN	DB-24PD with DIN-Rail Mounting
DB-24P CR	24-channel OPTO-22 compatible Opto-isolated Input Board (RoHS) Include : CA-5015 (50-pin Flat Cable 1.5m)
DB-24PD CR	24-channel Opto-isolated Input Board (RoHS) Include : CA-3710 (37-pin D-sub Cable 1.5m)
DB-24P/DIN CR	DB-24P with DIN-Rail Mounting (RoHS)
DB-24PD/DIN CR	DB-24PD with DIN-Rail Mounting (RoHS)

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Accessories

[CA-3720](#) 37-pin D-sub connector cable 2.0m



Non-"D" with CA-5015



"D" with CA-3710

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