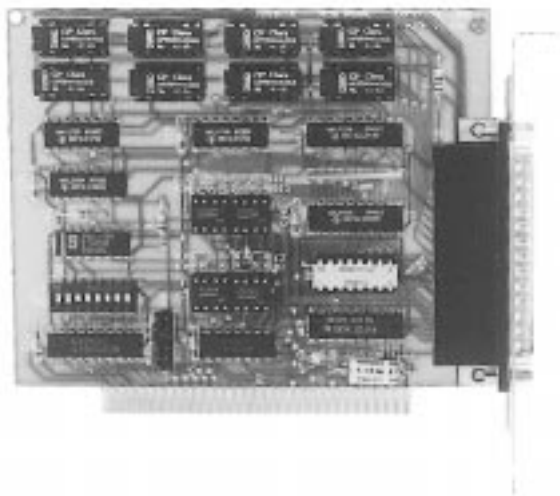# Model DIO16

16 Channel Isolated Relay Sensor I/O Control Board

FEATURES

- **8 Reed Relay Outputs (10 VA Resistive Load)**
- **8 Optically Isolated AC or DC Inputs (6-12 VAC/DC Range)**
- **DB-37 Connector for all 8 Inputs and 8 Outputs**
- **Output Ports have Non-Destructive Readback Capability**
- **Interrupt Capability (IRQ 2-7)**
- **Selectable Port Address**
- **Connector: DB-37 Male**
- **Power and Ground Provided on Connector**
- **Software Compatible with DIO-32B**

DESCRIPTION

The DIO16 offers the same features as the DIO32B, but with half the input and output channels. The DIO16 is a half length card with a single DB37 male connector providing the user interface

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APPLICATIONS

- **Instrumentation and Test Equipment**
- **Analog Multiplexing, Audio Switching**
- **Satellite/Microwave Network Control**
- **Monitoring/Switching Process Inputs**
- **Applications Requiring an Interface to Monitor and Sense Up to 8 Status Inputs and Control Signal Outputs with 8 Relays**

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SPECIFICATIONS

Channels

8 Input
8 Output

Input Range

6 - 12 VAC/VDC

Input Isolation

Optical, 400V

Input Frequency Response

DC to 5000 Hz

Throughput

660 Hz

Output Relay Specifications

200M Operations
10 VA, Resistive Load
20 G Shock & Vibration

Power Required

+5 VAC @ 0.4A

Operating Temperature

0 - 50° C

Humidity

10 - 90% RHNC

Maximum Input Volts

12V AC/DC

I/O Address Requirements

Four I/O Bytes

Connector

DB37 male

MTBF

>150,000 Hrs

Software

The software that is provided with this card supports several different models. Those models include the DIO32B, DIO16, 16ISO, 16REL, 16REL-L and the 32REL-B. The examples are written around the DIO32B, but the the DIO16, 16ISO, and 16REL are just subsets of the DIO32B. For example, the 16ISO will function with code written for the input section of the DIO32B. Additional code is provide for the 16REL-L, DIO16 and 32REL-B in separate directories.

Operating Systems Supported

DOS 3.x or greater

Languages Supported

Microsoft C V7.0 or greater
Microsoft Quick BASIC V4.5
x86 Assembler

Example Programs

Demo programs are provided in both interpretive and compiled BASIC. There are also demo routines in C. Both the compiled and linked versions are included. An assembly language driver is also included with source code.

ORDERING GIUDE

Model DIO16

Board, manual

Model UTB-K

Termination board/metal enclosure

Model UTB

Termination board

Model 2M37DSM

Screw termination board

Model C1800

18" (457mm) cable,
female to female

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