# DATA ACQUISITION SYSTEMS

#### USB to Digital I/O Interface

### OMG-USB-DIO Series



- Models with 48 and 96 Channels of Buffered Digital I/O
- 8255 Compatible
  8255 Compa
- ✓ 10K Pull Up Resistors On Each Port Bit
- True Hot Swapping/ Auto Configuration
- Includes Drivers and Utility software for 98/ME/NT/2000/XP

The OMG-USB-DIO Series contains 48 or 96 channels of buffered digital I/O emulating 8255s for industrial control applications. 10K pull up resistors are included on each port bit. The OMG-USB-DIO series contains 8 bit I/O ports configurable as inputs or outputs. This gives the user the ability to customize the combination of inputs or outputs as needed. In addition, the low order bit of the first port can be set to generate an interrupt for status monitoring applications. A special factory configurable interrupt feature allows the user to request conditional I/O combinations for interrupt generation. When the I/O combinations occurs, a hardware interrupt is triggered.

#### Software

The OMG-USB-DIO Series includes drivers, utilities, and programming samples for Windows 98/ME/NT/2000/XP to aid in the development of reliable applications for the OMG-USB-DIO family of USB to digital I/O interfaces.

## **Connectors and Terminal Panels**

All of the I/O signals are accessed through standard 50-pin connectors. The OMG-USB-DIO48 contains two connectors and the OMG-USB-DIO96 contains four connectors. OMEGA provides an optional OMG-TB07 terminal panel for wiring to the I/O connector.





OMG-USB-DIO96 shown with one OMG-TB07 terminal block mounted on included snap track and one OMG-CA167 cable (up to four terminal blocks and cables can be used). Shown smaller than actual size.

One terminal panel is required for each I/O connector. An OMG-CA167 cable is also needed for each terminal panel.

The I/O connector is also compatible with industry standard relay racks. An OMG-CA135 cable can be used to connect each I/O connector to a relay rack.

**Specifications** 

**Channels: 48,96** 

**Operating Temperature:** 0 to 50°C (32 to 122°F) **Storage Temperature:** 

-20 to 70°C (-4 to 158°F)

Humidity Range: 10 to 90% RH Output: 64 mA(sink), 32 mA (source), TTL Level Logic Power: From AC adapter

Connectors: (2 or 4) 50 Pin IDC

**Physical Dimensions:** 17.78 cm L x 13.34 cm W x 3.81 cm H (7.0 x 5.25 x 1.5")

To Order	
Model No.	Description
OMG-USB-DIO48	48 channel digital I/O interface
OMG-USB-DIO96	96 channel digital I/O interface
OMG-TB07	50 pin terminal block(requires OMG-CA167), includes snap track for mounting
OMG-CA167	40 inch 50 pin IDC cable, connects the OMG-USB-DIO to OMB-TB07
OMG-CA135	40 inch 50 pin edge cable, connects the OMG-USB-DIO to industry standard solid state relay racks
OMG-DR102	DIN rail mounting kit for OMG-USB-DIO

All OMG-USB-DIO interfaces include utility software and a complete user's manual on CD-ROM. **Ordering Example: OMG-USB-DIO48, 48** channel digital I/O interface, two OMG-TB07 terminal panels and two OMG-CA167 cables.