

# 32-Channel Isolated Digital I/O USB Data Acquisition Module

USB-4750



- ✓ Compatible with USB 1.1/2.0
- ✓ Bus-Powered
- ✓ 16 Isolated DI and 16 Isolated DO Channels
- ✓ High Voltage Isolation on all Channels (2500 Vdc)
- ✓ High Sink Current on Isolated Output Channels (100 mA/Channel)
- ✓ Supports 5 to 60 Vdc Isolated Input Channels
- ✓ Interrupt Handling
- ✓ Timer/Counter Capability
- ✓ Suitable for DIN-Rail Mounting
- ✓ Lockable USB Cable for Rigid Connection

The USB-4700 series consists of true Plug & Play data acquisition devices. No more opening up your computer chassis to install boards—just plug in the module, then get the data. It's easy and efficient. The USB-4750 is a 32-channel isolated digital I/O module for the USB bus. With isolation protection of 2500 Vdc, and dry contact support, the USB-4750 is ideal for industrial applications where high-voltage protection is required. Each I/O channel of the USB-4750 corresponds to a bit in an I/O port. This makes USB-4750 very easy to program.

This module also offers a counter or timer and one digital input interrupt lines to a PC. Users can therefore easily perform configurations by software. Reliable and rugged enough for industrial applications, yet economical for all types of projects, the USB-4750 is the perfect way to add measurement and control capability to any USB capable computer. The USB-4750 is fully USB Plug & Play and easy to use. It obtains all required power from the USB port, so no external power connection is ever required.



Windows software displays data in graphical or tabular format.

USB-4750 shown smaller than actual size.

Data collection is simple. Simply plug the data acquisition module into an available USB port and our easy-to-use Windows software does the rest. The software converts your PC into a real-time strip chart recorder. Data can be printed in graphical or tabular format. It can also be exported to a text or Microsoft Excel file.

## Specifications

### ISOLATED DIGITAL INPUT

**Channels:** 16  
**Input Voltage:**  
 Logic 0: 2 V max  
 Logic 1: 5 V min (60 Vdc max) or dry contact

**Interrupt Capable Ch:** 2  
**Isolation Protection:** 2500 Vdc

### ISOLATED DIGITAL OUTPUT

**Channels:** 16  
**Output Type:** Sink (NPN)  
**Isolation Protection:** 2500 Vdc  
**Output Voltage:** 5 to 40 Vdc  
**Sink Current:** 100 mA max per channel

## ISOLATED COUNTER

**Channels:** 2  
**Resolution:** 32-bit  
**Compatibility:** 5 V/TTL  
**Input Frequency:** 1 MHz max  
**Isolation Protection:** 2500 Vdc

## GENERAL

**Bus Type:** USB 1.1/2.0  
**Software:** Windows 2000/XP  
**I/O Connectors:**  
 Onboard screw terminals  
**Dimensions:**  
 132 L x 80 W x 32 mm H (5.2 x 3.1 x 1.3")  
**Power Consumption:** 5 V @ 200 mA typical; 5 V @ 300 mA max  
**Operating Temperature:** 0 to 60°C (32 to 140°F)  
**Storing Temperature:** -20 to 70°C (-4 to 158°F)  
**Storing Humidity:** 5 to 95% RH, non-condensing



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

## To Order

Model No.	Description
USB-4750	32 channel isolated digital I/O USB module

All USB-4750 data acquisition modules include Windows software and complete user manual on CD, and a 1.8 m (6') USB cable and DIN rail mounting kit.  
**Ordering Example:** USB-4750, 32-channel isolated digital I/O USB data acquisition module and OCW-1, OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 2 years.