



Part # MicroSI8-AO4

## **Description**

The **Micro-SI8-AO4** provides a flexible and cost effective way to allow sensor input and analog output expansion for the **MicroMag**. Each Micro-SI8-AO4 has a stand-alone microprocessor which communicates with the MicroMag over the MCS-I/O port at 38,400 baud. All data is check-summed with auto error correction. Because communication is over a RS-485 long distance two-wire differential network transmission system, the MicroSI8-AO4 may be located up to 5,000 feet away. Each Micro-SI8-AO4 board is equipped with a power transformer and an automatic power fail reset system.

The printed circuit board is a four layer board with a separate power and ground plane to provide the ultimate in electrical noise suppression. This coupled with noise suppression circuitry makes the Micro-SI8-AO4 virtually impervious to electrical noise.

The **Micro-SI8-AO4** provides eight sensor inputs. The inputs are universal and support either a digital or analog input signal.

Each input consists of three terminals grouped in pairs on a six position removable terminal block, providing +5vdc, ground and signal in. A polyfuse protects the +5vdc line from shorted sensors. The terminal blocks provide screw connections which eliminate the need for sta-cons. Because the terminal blocks are removable, board replacement requires no wires to be removed.

The Micro-SI8-AO4 also provides four analog outputs that provide independent dc voltage outputs from 0 to 10vdc.

## **Specifications**

## Controller

Dimensions
Mounting Holes 4 holes using #6 screws through
nylon collars at corners of board
Operating Temperature40°F to +175°F (-40°C to +80°C)
Storage Temperature40°F to +175°F (-40°C to +80°C)
Sensor Inputs (SI) 8 inputs 0-5vdc (10-bit A/D)
Analog Outputs (AO) 4 outputs 0-10vdc
Printed Circuit Board Four layer with separate power
and ground planes
Input Power (Standard) 24vac ±10% 50/60Hz @
77°F (25°C) ambient, 6 VA max
MCS-I/O Comm Port 1 @ 38,400 baud
Power Detection Automatic power fail reset