

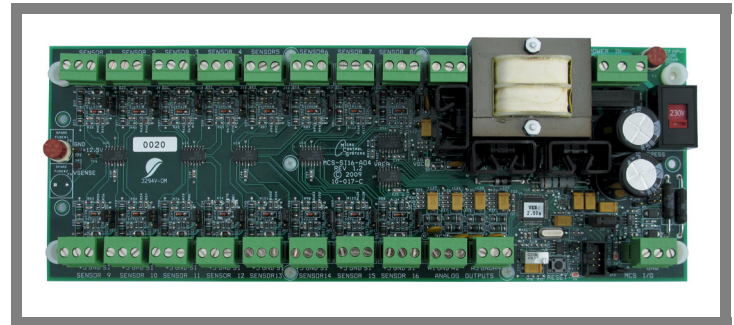


The MCS-SI16-AO4 Specifications & Description

Physical Characteristics

Controller Specifications

Dimensions 10.87"l, 4.00"w, 2.50"h
 Mounting Holes 4 holes using #6 screws through
 nylon collars at corners of board
 Cover Lexan with standoffs
 Operating Temperature -40°F to +158°F (-40°C to +70°C)
 Storage Temperature -40°F to +158°F (-40°C to +70°C)
 Microprocessor Microchip 16-bit PIC processor
 Sensor Inputs (SI) 16 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) 115 or 230vac ±10% 50/60Hz @
 77°F (25°C) ambient, 20VA max
 (Voltage is field selectable)
 MCS-I/O Comm Port 1 @ 38,400 baud
 Power Detection Automatic power fail reset



Part # **MCS-SI16-AO4**

Options

-24 24vac input power ±10%
 50/60Hz @ 77°F (25°C) ambient

Product Description

The MCS-SI16-AO4 provides a flexible and cost effective way to allow sensor input and analog output expansion for MCS micro controllers. Each MCS-SI16-AO4 has a stand-alone microprocessor which communicates with a MCS micro controller 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 MCS-SI16-AO4 may be located up to 5,000 feet away. Each MCS-SI16-AO4 board is equipped with a dual voltage 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 MCS-SI16-AO4 virtually impervious to electrical noise.

The MCS-SI16-AO4 provides sixteen sensor inputs. The inputs are universal and support either a digital or analog input signal.

The MCS-SI16-AO4 also provides four analog outputs that provide independent dc voltage outputs from 0 to 10vdc. However, these analog outputs can only be controlled by MCS-MAGNUM micro controllers running version 8 or higher software.

Each input and output consists of a three 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.