MCS-REMOTE-SI16-AO4
Description & Specifications

RoHS Compliant ✓

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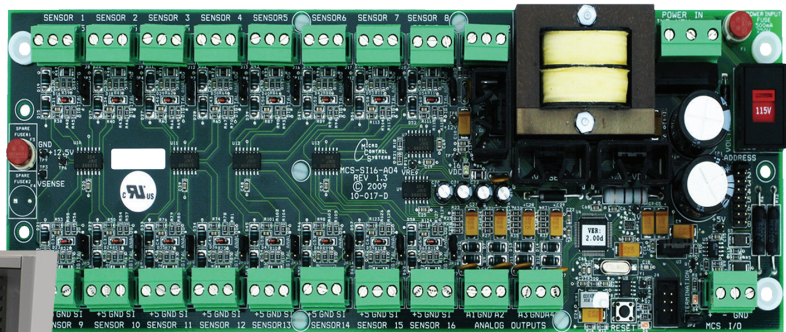
Part # **MCS-REMOTE-SI16-AO4**

Description

The **MCS-REMOTE-SI116-AO4** provides a flexible and cost effective way to allow remote expansion for the MCS-MAGNUM. Because communication is over a RS-485 long distance two-wire differential network transmission system, the enclosure can be located up to 5,000 feet away. Each MCS-SI16-AO4 has a stand-alone microprocessor which communicates with a MCS-MAGNUM over the MCS-I/O port at 38,400 baud. All data is check summed with auto error correction.

The 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 efficient 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 the 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.

Specifications

Small Enclosure-NEMA rating - Type 1

- Flush slotted latch operated with a screwdriver
- Butt hinges
- Mounting holes on back of enclosure
- 16 gauge steel
- FINISH - ANSI 61 gray polyester powder paint finish inside and out over pretreated surfaces

Dimensions........................ 14"L, 12"W, 4"D
Mounting Holes.................. Mounts with four pre-drilled holes

Controller

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)
Operating Humidity................0-95% Non-Condensing
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

Options

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