



## The MCS-I/O Panel Mount Specifications & Description

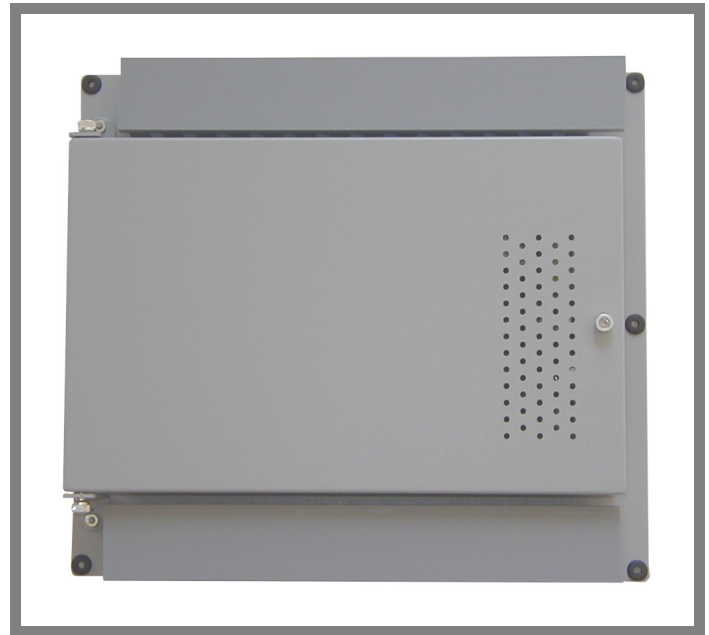
### Physical Characteristics

#### Package Specifications

Dimensions ..... 13.75" w, 12.25" h, 2.33" d  
 Mounting Holes ..... 6 holes w/rubber grommets  
 Wire Duct ..... 1.75" w x 1.62" h top & bottom  
 Cover ..... 12.87" w x 8.25" h hinged & removable  
 Color ..... Textured 'Profile Gray'  
 Material ..... 0.062" aluminum  
 Operating Temperature ..... -40°F to +175°F (-40°C to +80°C)  
 Storage Temperature ..... -40°F to +175°F (-40°C to +80°C)

#### Control Specifications

Microprocessor ..... Intel 80C196 @ 12mhz  
 Sensor Inputs (SI) ..... 8 inputs 0-5vdc (10-bit A/D)  
 Relay Outputs (RO) ..... 8 outputs 10amps @ 115vac  
 Analog Output (AO) ..... (1) 0-10vdc or 4-20mA  
 Printed Circuit Board ..... Four layer with separate power and ground planes  
 Input Power (Standard) ..... 115vac ±10% 50/60Hz @ 77°F (25°C) ambient, 20VA max  
 MCS-IO Comm Port ..... 1 @ 38,400 baud  
 Power Detection ..... Automatic power fail reset



Part # **MCS-I/O-P**

#### Options

**-24** ..... 24vac input power ±10%  
 50/60Hz @ 77°F (25°C) ambient  
**-230** ..... 230vac input power ±10%  
 50/60Hz @ 77°F (25°C) ambient



File No: E169780 (115vac & 24vac)

### Product Description

The MCS-I/O provides a flexible and cost effective way to allow sensor input, relay output and analog output expansion for the MCS-8 system. Each MCS-I/O has a stand alone microprocessor which communicates with the MCS-8 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-I/O may be located up to 5,000 feet away. Each MCS-I/O 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 MCS-I/O virtually impervious to electrical noise.

The MCS-I/O-P contains an MCS-I/O-N which provides eight sensor inputs, eight relay outputs and one analog output. The inputs are universal and support either a digital or analog input signal.

All input and output connections to the board are made through the use of three-position removable terminal blocks. The terminal blocks provide screw connections which eliminate the need for staycons. Because the terminal blocks are removable, board replacement requires no wires to be removed.

The MCS-8 currently supports up to five MCS-I/O's, depending on the software, for a total system expansion of 48 inputs and 48 outputs.