

## The MCS-8 & MCS-I/O Specifications & Description

### Physical Characteristics

#### Inside Control Panel Package

Dimensions ..... 13.75"l, 12.25"w, 2.85"h  
Mounting Holes ..... 6 holes w/rubber grommets  
Wire Duct ..... 1.5" x 10.5" long top & bottom  
Cover: ..... 8.25" x 12.75" hinged/removable

#### Door Panel Package

Dimensions ..... 13.75"l, 12.25"w, 3.15"h  
Mounting Holes ..... 12 holes plus cutout  
Wire Duct ..... 1.0" x 1.5" top & bottom

#### Box Package

Dimensions ..... 13.75"w, 12.25"h, 2.85"d  
Mounting Holes ..... 4 holes w/rubber grommets  
Wire Duct ..... 1.0" x 1.5" top & bottom

#### General Packaging Specification

Color ..... Texture 'Profile Gray'  
Material ..... 0.062 Aluminum  
LCD Display ..... 2x16 large char. extended temp.  
Keypad Size ..... 6.0" x 8.5" recessed on cover  
Keypad Layout ..... 8 status keys & 8 entry keys  
Temp. Operation ..... (w/LCD) -4 to +158 °F  
Temp. Storage ..... (w/LCD) -22 to +158 °F  
Input Power: ..... 120 Vac 50 / 60 hertz

#### Control Specifications

Microprocessor ..... Intel 80c196 @12mhz  
Relay Outputs (RO) ..... 8 outputs 10 amps. @120 Vac  
Sensor Inputs (SI) ..... 8 Inputs 0-5 Vdc  
Analog Output ..... (1) 0 to 10 Vdc or 4 to 20 ma  
Total Outputs & Inputs ..... 48 RO's, 48 SI's, 6 AO's  
Transformer ..... 120 Vac  
MCS-I/O Comm Port ..... 1 @ 38,400 baud  
RS485 Comm Port ..... 1 @ 19,200 baud  
RS232 Comm Port ..... 1 @ 19,200 baud  
Real Time Clock ..... battery backed up,  
Year 2000 Compliant  
Power Detection ..... automatic power fail reset  
Authorization ..... multiple levels  
Primary Control ..... built in safeties  
History Information ..... automatic all points

#### Options

Modem ..... 14.4K baud  
24 volt power supply ..... input power 24 Vac  
230 volt power supply ..... input power 230 Vac  
Backlit LCD ..... large character 2 x 16



### General Description

The system is designed to be cost effective allowing installation in smaller applications, yet expandable to handle large packages. The controller is designed to be the primary manager of the package it is controlling. The MCS-8 microprocessor is complemented with up to 5 MCS-I/O units or a combination of MCS-RO8's and MCS-SI8/16 units. Currently this allows for an expansion to a total of 48 Relay Outputs, 48 Sensor Inputs and 4 Analog Outputs.

The MCS-8 contains the keypad and display. It is the managing controller coordinating the I/O units. The I/O units communicate over the MCS-I/O port which is dedicated to this purpose. A second RS485 port is standard for the purpose of communicating to other manufacturers systems. The software interface is supplied in the MCS-8 and the data format is available to allow the user to add this feature.

A Windows based support package is available for your PC allowing for system configuration, dynamic on line display screens, remote communications, graphing, etc.. An optional system development package is available which allows the user to develop proprietary software.

The MCS-Portal allows communications via Backnet, Modbus, Johnson N2 and Automated Logic.