



## The MCS-RO8 Specifications & Description

### Physical Characteristics

#### Standard Mounting

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 (only on  
 standard mounting)

#### Box Mount

Dimensions ..... 13.87"w, 12.75"h, 2.31"d  
 Mounting Holes ..... 4 holes 0.31" diameter  
 Wire Duct ..... 1.75"w x 1.62"h top & bottom

Operating Temperature..... -40°F to +175°F (-40°C to +80°C)  
 Storage Temperature..... -40°F to +175°F (-40°C to +80°C)

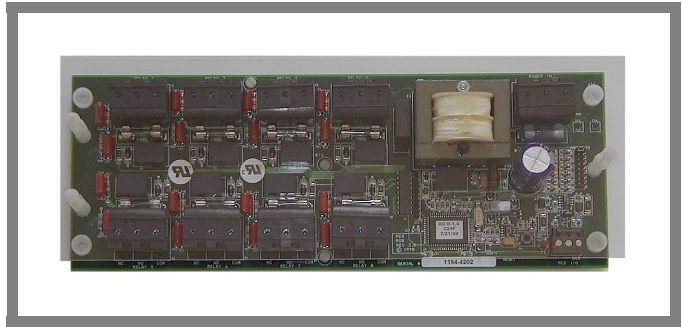
#### Control Specifications

Microprocessor ..... Toshiba TMP88PS49F @ 16mhz  
 Relay Outputs (RO) ..... 8 outputs 5amps @ 115vac  
 Printed Circuit Board ..... Four layer with separate power  
 and ground planes  
 Input Power (Standard)..... 115vac ±10% 50/60Hz @ 77°F  
 (25°C) ambient, 12VA max  
 MCS-I/O Comm Port ..... 1 @ 38,400 baud  
 Power Detection..... Automatic power fail reset

### Product Description

The MCS-RO8 provides a flexible and cost effective way to allow relay output expansion for MCS micro controllers. Each MCS-RO8 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 the communications is over a RS-485 long distance two-wire differential network transmission system, the MCS-RO8 may be located up to 5,000 feet away. Each MCS-RO8 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 electronics makes the MCS-RO8 virtually impervious to electrical noise.



Part # MCS-RO8

#### 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  
**-B** ..... Box mount  
**-SSM** ..... Modified for use with an  
 MCS-SOLIDSTATE



File No: E169780 (115vac & 24vac)

The MCS-RO8 provides eight relay outputs fused at 5 amps each using standard 5 x 20mm fuses. This allows for easy field replacement. Each relay output provides common, normally open and normally closed contacts on a removable terminal block. 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.