



# MCS-MAGNUM-SB-10.1

## Description & Specifications



Part # MCS-MAGNUM-SB-10.1

### Description

The **MCS-MAGNUM-SB-10.1** enclosure is made of powder coated aluminum for durability and longevity. A left hand swing door is mounted with two four-inch hinges for strength. A key lock is provided for security on the door while still giving easy access to the display. This box is intended for use in an environment protected from the weather.

The MCS-MAGNUM-SB-10.1 consists of a **MCS-MAGNUM** along with a Touchscreen 10.1" display.

The **MCS-TOUCH-10.1** is a touchscreen interface designed to simplify user access with the MCS-MAGNUM utilizing MCS-CONNECT to provide both graphics and service mode access to technicians. Information and graphics on the TOUCH-10.1 are shown on a 10.1" high resolution (1280x800) LCD display with LED backlighting, which will guarantee long-life operation.

For information on the MCS-MAGNUM, see specifications on our web site. Complementing the MCS-MAGNUM micro controller are a variety of MCS expansion boards that allow for system expansion to a maximum of 112 inputs and 80 outputs. Communication to these units occur at 38,400 baud over the MCS-I/O port which is dedicated for this purpose.

### Options

- MB-WIRELESS-MODEM ..... Cellular Modem with 1 yr subscription
- MB-24VOLT-(115/230) ..... 115(230) to 24vac transformer
- MB-WARNING-(24/115/230) ..... Yellow warning indicator
- MB-ALARM-(24/115/230) ..... Red alarm indicator
- MB-RUN-LT#(1/2/3/4) ..... Green run indicator
- MB-RUN-SW ..... Run/Stop selector switch
- MB-EMERG-SW ..... Emergency Stop switch
- MB-COMP#(1/2/3/4) ..... Single compressor on/off switch
- MB-BYPASS ..... Momentary bypass push button
- MB-ETHERNET ..... Industrial rated RS-232/Ethernet device

### Specifications

#### NEMA Rating – Type 1 Enclosure - IP20 Rating

Enclosure is intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment and is not protected from liquids.

#### Enclosure – Small Box

Dimensions..... 18.25" w x 19.5" h x 8" d  
 Mounting Holes..... Mounts with four pre-drilled 9/32" holes

#### Temp. Range for Enclosure & Touch Screen

Operating Temperature..... -4°F to 158°F (-20°C to 70°C)  
 Operating Humidity..... 0-95% Non-Condensing  
 Storage Temperature..... -4°F to 158°F (-20°C to 70°C)

#### Controller Specification

Microprocessor ..... Zilog eZ80 Acclaim! @ 50mhz  
 Sensor Inputs (SI)..... 12 inputs 0-5vdc (10-bit A/D)  
 Digital Inputs..... 4 inputs 0 or 5vdc only  
 Relay Outputs (RO)..... 10 outputs 6.3amps @ 230vac  
 Analog Outputs (AO) ..... 4 outputs 0-10vdc  
 Printed Circuit Board ..... Six 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  
 RS-485 Comm Port ..... 1 @ 19,200 baud  
 Ethernet..... 10/100 Mbps Ethernet  
 Real Time Clock ..... Battery backup  
 Power Detection ..... Automatic power fail reset

#### Touch Screen 10.1

Dimensions..... 12.204"L x 9.055"W x 3.215"H  
 Door Mount..... 10.875"L x 7.875" with cutout  
 10 mount studs thru customers encl.  
 HT800 Cellular Silicone Gasket  
 NEMA 4 IP66 rated  
 LCD Screen ..... 10.1" Diagonal (Aspect Ratio 16:10)  
 16.2 Million Colors  
 1280 x 800 Resolution  
 View Angle 85°U, 85°D, 85°L, 85°R  
 5-Wire resistive touch w/Stylus pen  
 White LED Backlight (Min Life 50,000 Hrs)  
 Luminance Min. 400 cd/m<sup>2</sup>  
 Surface Treatment..... Glare/Anti-Reflection ≤1.5%  
 Hard-Coating (3H)  
 Operating Temperature..... -20°C to +65°C Operating Temperature  
 Operating Humidity..... 0-95% Non-Condensing  
 Storage Temperature..... -25°C to +70°C Storage Temperature  
 Power Input ..... 12VDC regulated  
 Power Output..... 12VDC output regulated  
 Motherboard ..... Freescale i.MX6 Dual Core 800mhz  
 1Gb of 512mhz DDR3 RAM memory  
 4Gb of eMMC Flash memory  
 10m/100m/1G Ethernet  
 1 Micro-SD Slots  
 1 USB On-The-Go (OTG)  
 2 USB Host 2.0  
 Real Time Clock (RTC) w/ Battery  
 LVDS for 15.4" LCD 5-wire touch  
 3 RS485 communication ports  
 (max. baud rate 115k)  
 Mini PCIe Interface

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