



# MCS-MAGNUM-MLB-15.4-12

## INDUSTRIAL CONTROL PANEL



Part #  
**MCS-MAGNUM-MLB-15.4-12\***

## Description

The **MCS-MAGNUM-MLB-15.4-12 Industrial Control Panel** is made of powder coated aluminum for durability and longevity. A left hand swing door is mounted with three eight-inch hinges for strength. A key lock is provided for security on the door while still giving easy access of the display. This panel is intended for use in an environment protected from the weather.

The MCS-MAGNUM-MLB-15.4-12 consists of a **MCS-MAGNUM**, a Touchscreen 15.4" display and a MCS-SI-BASE expansion board. The **MCS-TOUCH-15.4** 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 MCS- TOUCH-15.4 are shown on a 15.4" high resolution (1280x800) LCD display with LED backlighting, which will guarantee long- life operation.

Power is supplied using a MCS-12V power supply.

Panel includes the following; 20A, and a 5A Single-Pole Circuit Breaker, a 5 port 10/100/1000 Ethernet Workgroup Switch Industrial rated, Red Alarm Indicator, Yellow Warning Indicator, Emergency Stop Switch and 3 Position Run/Stop Selector Switch. There is also a electrical outlet for laptop plug-in power at the panel and a Ground Bar for Sensor input shields.

Critical safety components manufactured by MCS and installed in this panel are UL Recognized Components under UL File #169780 and are also ROHS compliant.

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.

## Specifications

Certification.....UL508A

### **NEMA Rating – Type 1 Control Panel- 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.

### **Industrial Control Panel**

Rated Voltage (Standard)..... 120VAC or 230VAC  
'Phase / Frequency..... 1 Phase / 60Hz  
Full Load Current(approx) .... 40A at 120VAC or 20A at 240VAC  
Short Circuit Current Rating . 10kA  
Dimensions..... 22" w x 28.50" h x 8" d  
Mounting Holes..... Mounts with four pre drilled  
15/32" holes

### **Temp. Range for Control Panel & 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)

### **MCS-MAGNUM Controller**

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) ..... 12 vdc Regulated Power Supply  
Minimum (Brown in) ..... 9.44 vdc  
Amp Draw (Loaded) ..... 857.0 mA  
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

### **MCS-SI-BASE Expansion Board**

Sensor Inputs (SI)..... 16 inputs 0-5vdc (10-bit A/D)  
Analog Outputs (AO) ..... 4 outputs 0-10vdc  
MCS-I/O Comm Port ..... 1 @ 38,400 baud

### **Touch Screen 15.4 - Specification**

LCD Screen ..... 15.4" Diagonal (Aspect Ratio 16:10)  
Dimensions..... 17" L x 12.11" W x 3.228" H  
1280 x 800 Resolution  
NEMA 4 IP66 rated  
Surface Treatment..... Glare/Anti-Reflection ≤1.5%  
Operating Temperature..... -20°C to +65°C Operating Temperature  
Operating Humidity..... 0-95% Non-Condensing  
Storage Temperature..... -25°C to +70°C Storage Temperature  
Motherboard-Rev 4.0 ..... Freescale i.MX6 Dual Core 800mhz  
2Gb of 512mhz DDR3 RAM memory  
16Gb of eMMC Flash memory  
10m/100m/1G Ethernet  
1 Micro-SD Slots  
2 USB Host 2.0  
Real Time Clock (RTC) w/ Battery  
3 RS485 communication ports  
Crossover Cable (orange) .. can be used for connecting  
MCS Touchscreen direct to MCS-MAGNUM or to a Laptop

### **Packaging**

Weight ..... 60 lbs(approx)

Box ..... 24" x 10" x 30"

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