



MCS-MAGNUM-MLB-10.1

Description & Specifications

Part #
MCS-MAGNUM-MLB-10.1

Photo shown with optional lights/
switches & Expansion boards



Description

The **MCS-MAGNUM-MLB-10.1** enclosure 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 box is intended for use in an environment protected from the weather.

The MCS-MAGNUM-MLB-10.1 consists of a **MCS-MAGNUM, MCS-S116-A04** expansion board, and a Touchscreen 10.1 display. The **MCS-TOUCH-10.1** is a new 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-10.1 are shown on a 10.1" high resolution (1280x800) LCD display with LED backlighting, which will guarantee long-life operation.

Additional options are available as shown below.

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-RO10-(24/115/230) 10 relay output expansion board
- MB-SI16-A04-(24/115/230) 16 sensor input expansion board
- MB-24VOLT-(115/230) 115(230) to 24vac transformer
- MB-RUN-LT#(1/2/3/4) Green run indicator
- 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
- MB-ETHERNET-SW Ethernet switch and power supply
- MB-BMS-GATEWAY BacNet IP to MSTP/Lontalk
- MB-EXV-DRIVER-xx Control board for EXVs

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 – Medium Large Box

Dimensions 22"w x 28.50"h x 8"d
Mounting Holes Mounts with four pre drilled 15/32" 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/m²
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