



# MCS-MAGNUM-15.4

## Description & Specifications



Part # **MCS-MAGNUM-15.4**



### Description

The **MCS-MAGNUM-15.4** consists of a MCS-MAGNUM controller along with a Touchscreen 15.4 in display. The **MCS-TOUCH-15.4** 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 TOUCH-15.4 are shown on a 15.4" high resolution (1280x800) LCD display with LED backlighting, which will guarantee long-life operation.

The **MCS-TOUCH-15.4** can connect up to 60 MCS controllers and supports RS485 or Ethernet networking.

The MCS-TOUCH-15.4 makes it easy for the user to manage more complex installation diagrams, without losing the overall view of the installation, as well as ensuring that the pages can be browsed in a fast and straight forward manner.

The MCS-MAGNUM is a durable microprocessor based controller designed for the hostile environments in the HVAC/R industry. It is designed to be the primary manager of the package it is controlling. The Magnum provides flexibility with setpoints and control options that can be selected prior to commissioning a system or when the unit is live and functioning. Displays, alarms and other interfaces are accomplished in a clear and simple language that informs the user as to the status of the controller.

Complementing the Magnum micro controller are a variety of MCS expansion boards.

### Kit Content

- 50W Single Output Power Supply
- 115-230 VAC input ( $\pm 15\%$ )
- 12VDC output regulated Resistant to short circuiting, overloading, and over voltage. Operating temperature up to 70 °C
- 7ft CAT 5e Crossover Patch Cord, Orange



### Specifications

#### Controller

- Dimensions..... 12.0"w, 8.0"h, 2.0"d
- Mounting Holes ..... Mounts on a backplane utilizing 8 through-hole studs
- Operating Temperature ..... -40°F to +158°F (-40°C to +70°C)
- Operating Humidity ..... 0-95% Non-Condensing
- Storage Temperature ..... -40°F to +158°F (-40°C to +70°C)
- 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  $\pm 10\%$  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

#### Magnum Controller Option

- 24 ..... 24vac input power  $\pm 10\%$  50/60Hz @ 77oF (25oC) ambient

#### Touch Screen 15.4

- Dimensions ..... 17"L x 12.11"W x 2"H
- Mounting..... Door Mount
- 15.75"L x 10.875"W Cutout
- Mounts utilizing 10 through-hole studs
- Gasket Material ..... HT-800 Medium Cellular Silicone NEMA 4
- LCD Screen..... 15.4" (16:10 Diagonal)
- 16.2 Million Colors
- 1280x800 Resolution
- View Angle 70° x 70° x 70° x 70° (Up, Down, Left)
- Surface Treatment..... Glare/Anti-Reflection  $\leq 1.5\%$  Hard Coating (3H)
- Operating Temperature ..... -4°F to 158°F (-20°C to 70°C)
- Operating Humidity ..... 0-95% Non-Condensing
- Storage Temperature ..... -22°F to 176°F (-30°C to 80°C)
- Power Input ..... 115-230 VAC input  $\pm 15\%$ )
- Power Output..... 12VDC output regulated
- Motherboard ..... Freescale i.MX6 Dual Core 800mhz
- 1Gb of 512mhz DDR3 RAM Mem.
- 4Gb of eMMC Flash memory
- 1Gb Ethernet (100Mb/10Mb comp.)
- 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 w/5-wire resistive touch screen
- 3 RS485 communication ports (max. baud rate 115k)