



# MAGNUM-TOUCH-15.4-DEMO

## Description & Specifications



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### Description

The **MCS-TOUCH-15.4-DEMO** consists of a Magnum micro controller, **MCS-RO10** expansion board, a **MCS-SI16-AO4** expansion board and a MCS-TOUCH-15.4.

Also installed in the Demo unit is a **MCS-EXV DRIVER**, **MCS-500 Transducer** with cable, **MCS-THERMOSTAT**, **MCS-ZONE**, **MCS-CT300** a **MCS-POCKET ROUTER** and a MCS-T100. This setup allows the user to test both the demo unit and various software configurations in-house.

Communication with these units occurs at 38,400 baud over the MCS-I/O port, which is dedicated to this purpose.

**MCS-CONFIG** and **MCS-CONNECT** software packages are installed allowing for system configuration, dynamic on-line display screens, remote communication, graphing and more.

The MCS-MAGNUM is a durable microprocessor based controller designed for the hostile environment of the HVAC/R industry. It is designed to be the primary manager of the package it is controlling.

The MCS-MAGNUM provides flexibility with setpoints and control options that are selectable prior to commissioning a system or when the unit is live. Displays, alarms and other interfaces are accomplished in a clear and simple language that informs the user as to the status of the controller.

An Ethernet and RS-485 port is also provided for communication with other manufacturers systems.

Other new features include the integration of BACnet IP, Modbus IP and Modbus RTU into the Magnum.

### Demo Box Specifications

Dimensions..... 16" w x 21" h x 8" d

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

### MCS-EXV Driver/MCS-Thermostat and MCS-Zone-II

Operating Temperature..... -32°F to +158°F (-0°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 Analog or Digital)
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 & ground planes
Input Power (Standard) .....	115 or 230vac ±10% 50/60Hz @ 77°F (25°C) ambient, 20VA max (Voltage is field selectable)
Current Draw .....	200mA @ 115VAC 100mA @ 230VAC
MCS-I/O Com Port .....	1 @ 38,400 baud RS-485
Com Port .....	1 @ 19,200 baud Ethernet 10/100 Mbps Ethernet
Real Time Clock .....	Battery backup
Power Detection .....	Automatic power fail reset

### Touch Screen 15.4 - Specification

Dimensions.....	17"L x 12.11"W x 3.228"H
	Gasket Material HT-800 Firm Cellular Silicone -NEMA 4
LCD Screen.....	15.4" (16:10 Diagonal) 16.2 Million Colors
	1280x800 Resolution
	View Angle 70°x70°x70°x 70° (Up, Down, Left, Right)
	5-Wire resistive touch w/Stylus pen
	White LED Backlight (Min Life 50,000 Hrs)
	Luminance Min. 300 cd/m2
Surface Treatment .....	Glare/Anti-Reflection ≤1.5% Hard Coating (3H)
Power Input .....	12Vdc 2 amps
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
	3 RS485 communication ports (max. baud rate 115k)

### Kit Content

Pelican carrying case, Keyboard with USB connector, removable stylus touch pen, MCS-500-Transducer and cable.



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