



# MAGNUM-TOUCH-15.4-DEMO-12

## Description & Specifications



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### Description

The MCS-TOUCH-15.4-DEMO-12 consists of a Magnum micro controller, MCS-RO-BASE, MCS-RO-EXT, MCS-SI-BASE, MCS-SI-EXT expansion boards and a MCS-TOUCH-15.4 capacitive touchscreen interface.

Also installed in the Demo unit is a **MCS-EXV DRIVER**, **MCS-500 Transducer** with cable, **MCS-KEYPAD-PANL-12**, **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)..... +12vdc at 0.7amps (fully loaded)  
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 and MCS-SI-EXT Expansion Boards

Sensor Inputs (SI)..... 32 inputs 0-5vdc (10-bit A/D)

Analog Outputs (AO)..... 8 outputs 0-10vdc

MCS-I/O Comm Port ..... 1 @ 38,400 baud

### MCS-RO-BASE and MCS-RO-EXT Expansion Boards

Relay Outputs (RO)..... 20 outputs 5amps @ 230VAC

### Touch Screen 15.4 - Capacitive Touchscreen

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

5-Wire resistive touch w/Stylus pen

Surface Treatment

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;

2 USB Host 2.0; Real Time Clock (RTC)

w/ Battery

Touchscreen Surface..... UV Degradation Protection

### Kit Content

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



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