



The MAGNUM-DEMO Specifications & Description

Physical Characteristics

Controller Specifications

Dimensions	12.0"w, 8.0"h, 2.0"d
Mounting Holes	Mounts on a backplane using six #6 sheet metal screws
Operating Temperature	-22°F to +158°F (-30°C to +70°C)
Storage Temperature	-40°F to +158°F (-40°C to +85°C)
Microprocessor	Zilog eZ80 @ 50mhz
Sensor Inputs (SI)	11 inputs 0-5vdc (10-bit A/D) (12 for Hardware Revision 4)
Digital Inputs	3 inputs 0 or 5vdc only (4 for Hardware Revision 4)
Relay Outputs (RO)	10 outputs 6.3amps @ 115vac
Analog Outputs (AO)	2 outputs 0-10vdc (4 for Hardware Revision 4)
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
RS-232 Comm Port	1 @ 19,200 baud
Real Time Clock	Battery backup
Power Detection	Automatic power fail reset

Keypad/LCD Specifications

Display	128 x 64 dot pixel STN monochrome graphics LCD with 2.8" diagonal viewing area
Color	White characters on a blue background (Reversible)
Keypad Size	7.25"w x 8.50"h (6 mounting studs)
Keypad Layout	9 keys (3 function keys)

Product Description

The Magnum is a rugged 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 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.



Part # **MAGNUM-DEMO**

The MAGNUM-DEMO consists of a Magnum micro controller mounted to a backplane and attached to a stand along with a keypad and display. This setup allows the user to test various software configurations in-house. Complementing the Magnum micro controller are MCS-I/O, MCS-RO8 and MCS-SI16 expansion boards. This allows for system expansion to a maximum of 48 inputs and 48 outputs. Communication to these units occur at 38,400 baud over the MCS-I/O port which is dedicated for this purpose.

A RS-485 port is also provided for communication with other manufacturers systems. Additionally, a built-in RS-485 to RS-232 converter allows communication over the RS-485 port via the RS-232 port

A complete software support package is available for your PC allowing for system configuration, dynamic on-line display screens, remote communication, graphing and more. An optional system development package is also available for the development of proprietary software.