Product Description

The M-Controller 2 is a multi-channel controller and alarm unit. It utilizes both digital and analog communications to interface with a maximum of 32 remote digital transmitter/sensors, and 8 analog transmitter/sensors. Range and alarm setpoints are set either through the front keypad or through software that is downloaded to the controller from a PC or laptop computer. Common relay configurations include voting, averaging, delay on actuation and de-actuation, normally/not-normally energized and latching. An additional feature includes 24 VDC outputs for a horn and strobe. A RS-485 port is provided for Modbus or BACnet IP (optional) protocol for interface with a Building Automation System (BAS). The USB port is primarily used for uploading and downloading a large configuration database. Also available, is an analog output card that includes eight 4-20 mA analog outputs. Each analog output can be defined in complex fashions allowing the averaging of several input signals and the assignment of different values to both the 4 and 20 mA outputs. The M-Controller automatically linearizes the values between these two points.

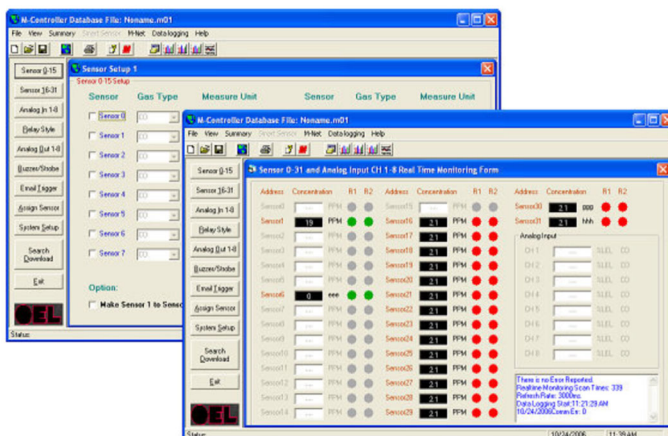The M-Controller is covered by a Two (2) Year Limited Warranty.

Product Features

♦ Four-wire multi-drop configuration reduces the overall installation cost of the system.
♦ Four serial ports for digital communication with QEL transmitter/sensors and relay modules.
♦ A maximum of 32 inputs can be arranged in any configuration to these ports including all 32 on any one port.
♦ Eight channel analog inputs for any gas transmitter/sensor or other 4-20mA input signals from any other type of transmitter/sensor.
♦ Configurable from the front keypad or from a PC or laptop computer.
♦ Sturdy and stylish lockable enclosure.
♦ Modbus or optional BACnet/IP for interface to Building Automation Systems.

Configuration Software

The M-Controller 2 can be fully configured and programmed from the keypad; however, for moderately complex networks, an interface and computer program (M-View) is supplied to allow all database programming to be setup on a computer (laptop) and downloaded to the M-Controller.

The M-View software has been designed as an easy to use configuration software package, that greatly reduces M-Controller's configuration time. M-View allows for both programming and audit control, as you may download, upload and save programs to disk. Standard Version M-View includes a 5 minutes Real Time Monitoring function and is free for all M-Controller users.

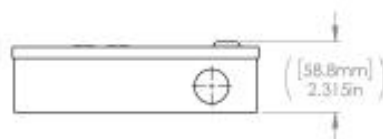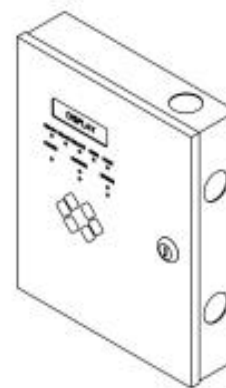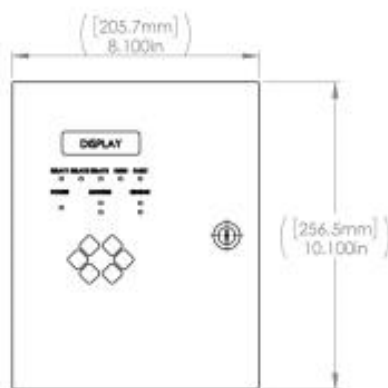Specifications are subject to change without notice.

Product Specifications

Supply Voltage[1]:	18 to 30Vdc, 24Vdc nominal | 15 to 24Vac 50/60Hz, 24Vac nominal | Half-wave or full-wave rectified
Current:	750mA Maximum
Network Capacity:	Three Modbus channels for up to 32 transmitters
Communication Cable:	Up to 4000' (1219m) per channel, Belden 9841 or equivalent twisted shielded pair, 120Ω
Programming:	On-board keypad or M-View software (software and USB programming cable included)
Operating Conditions:	-4 to 122°F (-20 to 50°C), 0 to 95% RH non-condensing
Storage:	32 to 68°F (0 to 20°C) 0 to 99% RH non-Condensing
Input Types:	4 parallel RS-485 digital ports for up to 32 QEL transmitter/sensors, 99 relays, 8 analog 4-20 mA inputs, Two (2) dry-contact switch inputs
Outputs:	Optional 8 analog outputs (4-20mA signals with one common)
Relay Outputs:	3 SPDT Form C dry contacts, rated 5 A resistive 3.7 A inductive @ 250 Vac/30 Vdc
Relay Life Expectancy:	Mechanical: Minimum 5,000,000
LED Status Lights:	5 Red; Relay 1, Relay 2, Relay 3, Hush, Fault
Audio Indicator:	90 db @ 12" (30cm), 2700 Hz, 3 Buzzer tones
Time Delays:	Individually set, make, break, average, and voting, 0 to 60 minutes
LCD Digital Display:	Four-line Backlit LCD display
Keypad:	6X tactile & audible keypad
Horn & Strobe Outputs:	Two dedicated dry contact terminals with dedicated 24Vdc Power terminals, 750mA Max.
Operating Environment:	Indoor use only
Enclosure:	NEMA 1, steel, epoxy painted black
Dimensions:	10"H x 8"W x 2"D (254mm x 203mm x 51mm)
Shipping Weight:	5.00 lbs (2268 g)
Terminal Blocks:	Depluggable, Power Wiring: 16 to 26 AWG (0.2 to 1.00 nm^2) Twisted Pair
Terminal Block Torque:	Rating: 0.37 ft-lb (0.5 n-3m) Nominal
Approvals:	Standard UL 2017, 2nd Edition 2008

Note[1]: Refer to the installation drawings or contact Specified Controls Technical Support for wiring connections

NOTES:
1.   DIMENSIONS IN PARENTHESIS ARE FOR REFERENCE ONLY

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