



M-CONTROLLER 2

Multi-Channel Analog / Digital Controller

The M-Controller 2 is a multi-channel controller utilizes both digital and analog communications to interface with a maximum of thirty-two (32) remote digital transmitter/sensors, and eight (8) analog transmitter/sensors. The three (3) programmable on-board SPDT Form C dry-contact relays can be configured for voting, averaging, relay on/off delay, normally energized/not-normally energized and latching/non-latching for fan control. The M-Controller 2 has four (4) RS-485 ports for sensors, two (2) dedicated terminals for a horn and strobe, and has a RS-485 port for MODBUS RTU or BACnet IP (Optional) protocol which allows a BAS to monitor the gas detection system. The M-Controller 2 can be programmed using the onboard keypad or using the M-View Software and USB programming cable (Included). The optional analog output card has eight 4-20 mA analog

outputs can be set up to output the average of multiple sensors, output the highest signal from multiple sensors. The M-Controller 2 can also compare two different gases (CO and NO2) and output the highest from either to gas to modulate a VFD. Each relay module is addressed from 0 to 11 and is defined by a four-position dipswitch and will correspond with relays 4 through 99. The M-Relay module is available with 2, 4, 6, or 8 relays per module. Refer to all applicable Federal, State, Provincial and Local Health and Safety laws and regulations before using these products.

Applications: Underground Parking Garages, Water Treatment Plants, Municipal Service Garages, Aircraft Hangers, Chiller Monitoring, Warehouses, Automobile Dealerships & Battery Charging / Storage

The M-Controller 2 is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, workaci.com.

PRODUCT SPECIFICATIONS

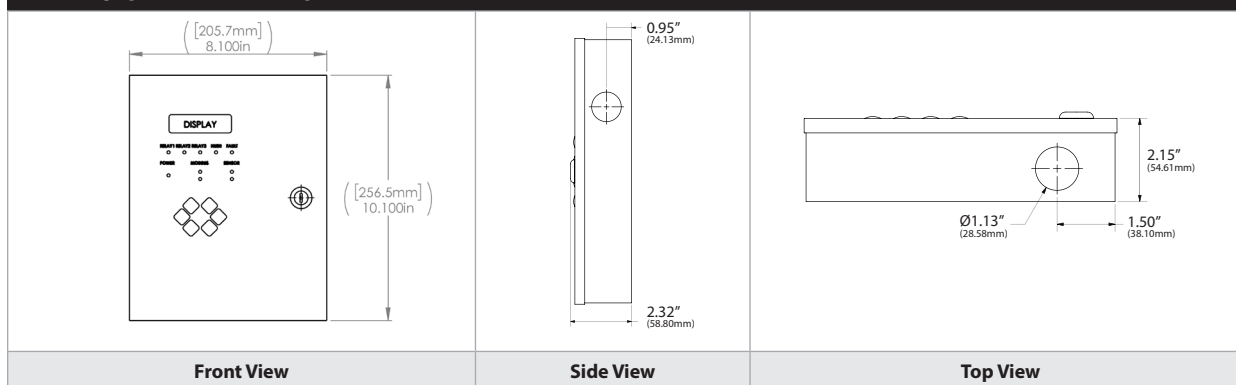
Supply Voltage¹:	18 to 30VDC, 24VDC nominal 15 to 24VAC 50/60HZ, 24VAC nominal Half-wave or full wave rectified
Current:	750mA Max
Operating Temperature:	-4°F to 122°F (-20°C to 50°C)
Operating Humidity:	0% to 95% non-condensing
Programming:	On-board keypad or M-View software (software and USB programming cable included)
Output Port:	Modbus RTU (Slave) or BACnet IP (Optional)
Inputs:	Digital: Four (4) Parallel RS-485 ports allow up to thirty-two (32) QEL gas sensors, and up to ninety-nine (99) relays Analog: Eight (8) channels of 4-20 mA inputs with one common Binary: Two (2) dry-contact switch inputs
Outputs:	Optional 8 analog channels of 4-20 mA signals with one common
Connection to BAS:	Modbus RTU or BACnet IP (Optional)
Panel Indicators:	Ten (10) LEDs: Three (3) Relay status, Hush, Fault, and Power TX/RX Status for Sensor Network
Display:	Four-line Backlit LCD Display
Keypad:	6X tactile & audible keypad
On-Board Relays:	Three (3) SPDT Form C relays, dry contact
Relay Life Expectancy:	Resistive: 5A at 30VDC, 250 VAC Inductive: 3.7A at 30VDC, 250VAC
Time Delays:	Mechanical: Minimum 5,000,000
On-Board Buzzer:	Actuation / De-Actuation: 0 to 60 minutes
Horn & Strobe:	90 db @ 12" (30 cm), 2700 Hz; 3 Buzzer tones
Storage:	Two dedicated dry contact terminals with dedicated 24VDC power terminal, 750mA Max
Enclosure:	32°F to 68°F (0°C to 20°C) 0 to 99% RH Non-Condensing
Operating Environment:	Steel, epoxy painted black, NEMA 1
Dimensions:	Indoor use only
Terminal Blocks:	(H) 10.00" (254 mm) x (W) 8.00" (203 mm) x (D) 2.00" (51 mm)
Terminal Block Torque Rating:	Depluggable, Power Wiring: 16 to 26 AWG (0.2 to 1.00 mm ²) Twisted Pair
Communication Wiring:	0.37 ft-lbs (0.5n-3m) Nominal
Shipping Weight:	Belden 9841 or equal
Options:	5.00 lbs (2268 g)
	BACnet IP to BAS
	Analog Output Card: 8-channel 4-20mA output with one common
	NEMA 4X Enclosure: Polycarbonate, flammability rating UL94V-O M-Relay (2, 4, 6 or 8 relays per module)
	'P': Professional version of software for real time monitoring and data logging
Agency Approvals:	Standard UL 2017, 2nd Edition 2008

Note¹: Refer to the installation drawings or contact ACI Technical Support for wiring connections





DIMENSIONAL DRAWING



STANDARD ORDERING

Model #	Item #	Description
M-CONTROLLER2-x00	152090	M-Controller 2 with M-View Software

ACCESSORIES ORDERING

Model #	Item #	Description
BAC-BOX	138896	BACnet IP output module
84330-611-000	152115	M-Controller 2 8 x channel analog output board
84330-621-000	149993	NEMA 4X Enclosure for M-Controller 2
5610-0101	150897	USB A to USB B M/M programming cable (Included with M-Controller 2)
85530-010-000	150896	M-View USB Software
M-ANNUNCIATOR	135212	Annunciator Panel for M-Controller 2
M-RELAY-5X-2	125946	Relay, 2DPDT, 5 Amps for M-Controller 2
M-RELAY-5X-4	125947	Relay, 4DPDT, 5 Amps for M-Controller 2
M-RELAY-5X-6	138717	Relay, 6DPDT, 5 Amps for M-Controller 2
M-RELAY-5X-8	125948	Relay, 8DPDT, 5 Amps for M-Controller 2
Q-SWITCHA-0	138897	Manual Input Switch for M-Controller 2

**ACCESSORIES ORDERING | HORN STROBE**

Model #	Item #	Description
FSIG-SLM500A	136476	Streamline Horn and Strobe (Amber)
FSIG-SLM500B	142976	Streamline Horn and Strobe (Blue)
FSIG-SLM500C	150028	Streamline Horn and Strobe (Clear)
FSIG-SLM500G	143013	Streamline Horn and Strobe (Green)
FSIG-SLM500R	143132	Streamline Horn and Strobe (Red)

ACCESSORIES ORDERING | MOUNTING BASE

Model #	Item #	Description
FSIG-SLMBD-012-024GY	142977	Deep Base for FSIG-SLM500 Series; Gray
FSIG-SLMBW-012-024GY	136477	Wall Mount Base for FSIG-SLM500 Series; Gray

Note: See Strobe & Alarm Data Sheet if required

