



Bid Specifications: ModCon75 Controller

PHYSICAL CHARACTERISTICS

Panel Mount	Weight - 3 lbs.
	Dimensions- 6.1"H x 10.24"W x 2.8"D
	Enclosure Type - None
	Max Number of Sensors - 75
	Front Panel is IP65 / NEMA 4X (when mounted)
	Mounting Provisions - Installation designed for panel mount
Wall Mount	Weight - 15.6 lbs.
	Dimensions - 17.6"H x 15.3"W x 7.3"D
	Enclosure Type - Fiberglass Enclosure with panel mount display and controls
	Max Number of Sensors - 75
	Mounting Provisions - Four mounting holes located on top and bottom (2 each) for flat surface attachment.

GRAPHICAL DISPLAY SCREEN

Type	Negative blue STN LCD graphical display
Illumination Backlight	CCFL (Fluorescent lamp)
Display Resolution	Shall be 240 x 64 pixels.
HMI Displays	Up to 255

BATTERY BACKUP

Battery Backup	Shall include 7 year typical battery backup for all memory sections and real-time clock.
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ENVIRONMENTAL

Temperature	Operating Temperature range of the controller is 0° to +50°C (32° to 122°F).
Humidity	Operating Humidity range 5-95% RH, non-condensing.

POWER REQUIREMENTS

Input Power Requirement	24 VDC
Power for Sensor Transmitters	Power output shall be <1.5 amps maximum at 24VDC for the Ultima X3 sensors.

CONTROLLER OPERATING REQUIREMENTS

Baud Rate	Must be set to 19,200.
Output capability	Shall have RS-485 (ModBus), two RS-232 ports and Ethernet port.
Display Indicators	Controller must indicate, at a minimum, sensor gas reading, sensor missing, sensor end of life, lost communications, calibration fault and calibration in progress.

SENSOR REQUIREMENTS

Sensor Transmitter Input Requirements	The remote sensors shall be Ultima X Gas Monitors with X ³ Technology (ModBus communications).
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WARNING, ALARM CONTROL REQUIREMENTS

Relays	Each module shall have ten (SPST) normally open relays. Four share a common signal (8 A output), one is for horn and all other outputs have discrete contacts (5 A output).
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USER INTERFACES

Security	Shall have two password levels available.
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DATALOGGING

Datalogging	Shall have the ability to record up to 2000 events.
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APPROVALS

Approvals	Shall be cUL Listed (panel only).
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WARRANTY

Full Replacement Warranty	Controller shall have one year parts and labor standard warranty with extended warranty available.
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MAINTENANCE REQUIREMENTS

Maximum System Maintenance	The Controller shall not require periodic maintenance other than verifying the Sensor Transmitter inputs are responding to the target gases.
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MANUFACTURER

Instrument Supply	The manufacturer must be capable of supplying all equipment used to check or calibrate the sensor / transmitter units.
Product Service	The manufacturer must be capable of providing on-site service with factory trained personnel.
On-site Training	The manufacturer must be capable of providing on site training for owner/operator.