

# **PRODUCT SPECIFICATION**

## **MSA Modcon 75 Touch Controller Specification**

- 1.0 This specification details the attributes and operating characteristics of the MSA Modcon 75 Touch gas detection central monitor and controller. This unit shall have the capability to monitor the signals of up to 25 field mounted MSA Ultima X3 sensor/transmitters, each with up to 3 attached sensors.
  
- 2.0 Gas Monitor/Controller Requirements
  - 2.1 Physical Characteristics:
    - 2.1.1 Weight: 21 lbs (wall mount), 2.6 pounds (panel mount)
    - 2.1.2 Wall Mount Dimensions: 17.3"H x 15.3"W x 6.7"D
    - 2.1.3 Wall Mount Enclosure Type: NEMA 4X fiberglass Enclosure with panel mount display and controls
    - 2.1.4 Expandable up to a maximum number of 75 sensors
    - 2.1.5 Mounting Provisions - Four mounting holes located on top and bottom (2 each) for flat surface attachment.
  
  - 2.2 User Interface
    - 2.2.1 Shall have Touch screen for easy configuration
    - 2.2.2 Security: Shall have password available.
    - 2.2.3 Graphical Display Screen
    - 2.2.4 TFT type LCD display, Backlight type: white LED
    - 2.2.5 Typical Backlight half-life 50,000 hours
    - 2.2.6 Resolution (pixels) 800 x 480
    - 2.2.7 Size 7"
    - 2.2.8 Resistive analog touch screen
  
  - 2.3 Datalogging: Shall have the ability to record alarm and fault events via a removable 32 GB micro SD card
  
  - 2.4 Power Requirements
    - 2.4.1 Input Power Requirement: 24 VDC
    - 2.4.2 External power supply to power the field sensor/transmitters mounted in a general purpose enclosure. 6A 24VDC output, 120VAC input.
    - 2.4.3 Battery Backup: Shall include battery backup for all memory sections and real-time clock.
  
  - 2.5 Environmental:
    - 2.5.1 Temperature: Operating Temperature range of the controller is 0° to +50°C (32° to 122°F).
    - 2.5.2 Humidity: Operating Humidity range 5-95% RH, non-condensing.

- 2.6 Sensor Requirements:
  - 2.6.1 Sensor Transmitter Input Requirements: The remote sensors shall be Ultima X Gas Monitors with X3 Technology (ModBus communications).
- 2.7 Warning, Alarm and Control Requirements
  - 2.7.1 Relays: Each module shall have nine (SPST) zone relays.
  - 2.7.2 Sensors shall be assignable to the 9 different relay zones.
  - 2.7.3 Common fault and horn relays
  - 2.7.4 ModBus TCP/IP Output
- 2.8 Approvals: cULus and CE approval on Unitronics controller
- 2.9 Warranty: Controller shall have one year parts and labor standard full replacement warranty with extended warranty available.
- 2.10 Manufacturer Capabilities:
  - 2.10.1 Instrument Supply: The manufacturer must be capable of supplying all equipment used to check or calibrate the sensor / transmitter units.
  - 2.10.2 Product Service: The manufacturer must be capable of providing on-site service with factory trained personnel.
  - 2.10.3 On-site Training: The manufacturer must be capable of providing on site training for owner/operator.