

Static Monitor — Multi-Point Fieldmeter and Alarm System



- *Intrinsically safe sensor operation (with optional barriers) in explosive atmospheres*
- *4 channel Static Monitor detects static levels in as many as four locations up to 1000 feet away*
- *Accurate and drift-free measurement including ionized environments*
- *Provides analog outputs and control via RS232/485 and front panel*
- *Control and data acquisition, configuration via RS232/485 using MODBUS interface format*
- *Built in, fully configurable dual level alarms programmable via front panel, PC or PLC*
- *Cascade up to 32 units via RS485 providing 128 sensor locations*
- *Simple Windows® GUI interface for set up and control*
- *PLC compatible using MODBUS protocol*
- *Password Security*
- *“Fail safe” relay configuration*
- *“Bad Input” protection or console failure indication*
- *Founded on proven Non-Contact Electrostatic Fieldmeter technology*

The only full-time, plant-wide automatic defense against undetected static buildup

This Static Monitor/Alarm System is the only intrinsically safe system that continuously monitors the critical points in your facility to detect and warn of electrostatic charge buildup before it becomes a problem.

In a typical scenario, as static levels in your application surpass a preset value, beyond which there may be a danger to personnel or possible disruption or destruction to the process or product, an initial warning is triggered and the process is allowed to continue. If the problem is rectified, the “warning” returns to a “normal” state. If the condition persists and the static level exceeds a second more crucial value, an alarm is activated terminating the process until corrective action is taken and the system is reset.

Accurate, versatile and dependable, unattended operation makes this monitor ideal for applications such as:

- **Converting, Coating, and Printing processes**
- **Dry particle transport systems**
- **“Static-free” environments**
- **Explosive atmospheres** — Safely monitors potentially hazardous sites to detect charge buildup. Model 1036 Sensors are Factory Mutual Research approved: Class I, Division 1, Groups C and D. ATEX Approved Sensors available through Extronics (www.extronics.com)

Simple to install and use

1. Mount sensors at all static-critical locations.
2. Mount the console in your rack enclosure. (Monitoring more than four location requires additional consoles.)
3. Connect leads between sensors and console and RS485/232 and Alarm contact.
4. Install software and configure your system.
5. Turn console power on and zero each channel to be used.
6. Begin reliable, continuous, drift-free, multipoint static measurements.

Specifications

Monitor Console Temperature Range:

+15° to +45° C

Analog Outputs (user selectable):

±10 V, 0 - 5V (2.5V, ±2.5V full scale); <10 Omega impedance; or simultaneous 4-20mA (optional)

RS232/485 Control: Channel status, channel disable/enable, group control

Accuracy: Better than 3%, of full scale

Stability: ±0.1% of full scale

Displays: Four 3½-digit LEDs, 0.6" (one per input channel)

Power Requirements: 90-260 VAC, 47-60 Hz

4-20 mA Option Power Requirements:

Internal power supply 11V min

External power supply 24 V max

Alarm Relays: Per channel fail safe, NC (Form B)
System O.K.
Channel O.K.
Warning
Alarm

Contact Ratings: DC = 1A, 30V; AC = .05A, 125V

Connector Styles: RS485 = DB9
Probe = DB9
Analog Out = BNC
Test Connector = screw terminals
4-20 mA option = screw terminals

Dimensions: 1¾ x 19 x 11 inches
(4.45x 48.26 x 27.9 cm);
Mounts in a standard 19" rack

Weight: approx. 6 lbs

Enclosure (optional) Capacity Dimensions:

Two Monitor Consoles 4.5 x 20 x 14 inches
(11.4 x 50.8 x 35.6 cm)

Certifications: CE Mark compliant

Accessories Included: Manual on CD, 110V Line Cord, 220V Line Cord, DB9 M/F Straight-Thru Cable, USB A-Male/B-Male Cable, Mounting Hardware.

Two 2 position & Four 6 position plugs

Calibration

Factory-calibrated prior to shipment. Recalibration should be performed annually, or more frequently if specified by contract or company policy. Your instrument should also be recalibrated any time it has been repaired or tampered with. We are happy to recalibrate your instrument for you at a reasonable cost, or provide information and procedures on calibration upon request.

1036 E & F Sensors (sold separately)

Standard Range: ± 10kV/inch

Optional: ± 1kV/cm (100kV/m)
± 10kV/cm (1MV/m)
± 20kV/cm (2MV/m)
± 1kV/inch

Sensitivity: 0.025% of full scale

Drift: 1% of full scale (typical), noncumulative, long-term when purged according to manufacturer's instructions

Noise: <0.05% of full scale, peak-to-peak

Speed of Response: 250 ms, 10%-90% of full scale (typical)

Dimensions:

Model 1036E = 6.0 x 3.0 x 2.063 inches
(15.24 x 7.62 x 5.24 cm)
Model 1036F = 1.75dia. x 1.22 inches
(4.45 x 3.11 cm)

Maximum Cable Length: 1000 ft. (305 m)

Temperature Range: -30° C to +85° C

Warranty

Each instrument and sub-assembly shall be free from defects in material and workmanship for a period of one year after shipment from the factory. This warranty is applicable to the original purchaser only.