SIMCO ION™
An ITW Company



Handheld Electrostatic Fieldmeter

FMX-004

Simco-Ion's Model FMX-004 Fieldmeter is a compact handheld electrostatic fieldmeter used for locating and measuring static charges. Its pocket size makes it handy to use and four-button operation makes it easy to operate.

The FMX-004 measures static voltages within ±30 kV (30,000V) at a distance of 1 inch. Results are simultaneously displayed numerically and in bar graph format. POWER on/off, ZERO adjustment, MODE and HOLD are all push button operation. The HOLD button allows the display to retain the static charge reading. This is especially useful where display is difficult to see during measurement.

Two LED guide lights help position the fieldmeter at the right distance from a charged test object. The conductive case and ground snap facilitate grounding for accurate measurement. The circuitry of the FMX-004 has been designed to make measurements in areas using air ionization.

Features

- Digital display with color coded bar graphs
- Lightweight, compact design
- Distance ranging lights
- Audible alarm feature
- Battery powered with auto shut-off feature
- Analog Output

Benefits

- Easy to read especially in low light environments
- Convenient to use in hard to reach areas
- Ensures accurate distancing and measurements
- User convenience feature to insure proper operation
- Extends battery life; energy efficient
- Signals to a chart recorder or other device for hard copy documentation of static charge levels

Ionization Solutions

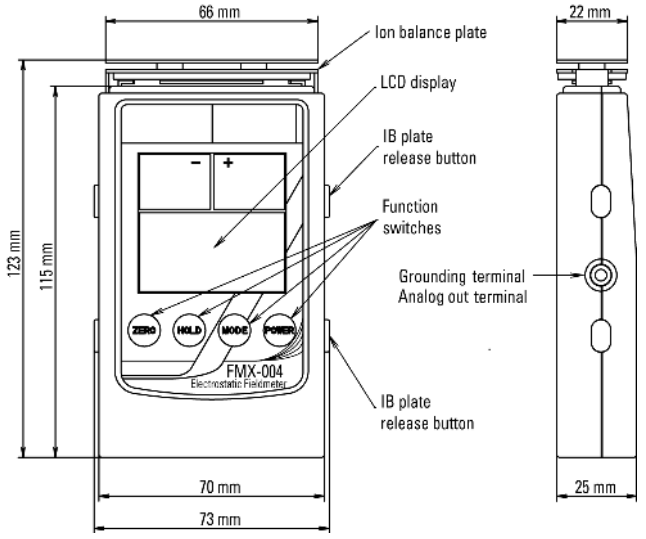
WWW.SIMCO-ION.COM

Specifications

Range	0 to ±1.49 kV (low range); ±1.0 kV to ±30 kV (high range)
Balance	0 to ±300V
Distance	1" ±0.2" (25 mm ±0.5 mm); LED guide for correct distance (between charged object and Fieldmeter)
Response Time	<1s
Accuracy	±10%
LCD Display	Bar graph: red POSITIVE POLARITY; blue NEGATIVE POLARITY
LCD Renewal Rate	5 times/s
Bar Graph Range	(Auto) ±0.1 kV (Low); ±2 kV (High); ±20V ion balance
Digital Display	Auto-ranging: 3 digits x.xx = 0 to ±1.49 kV xx.x = ±1.0 kV to ±30.0 kV (Hi); xxx = 0 to 300 (Ion Balance); [HOLD]: Retains display after a measurement; [A.OFF]: Auto power-off function deactivated; [Err]: Error sign if sensor is damaged; Battery condition display (4 stages)
Alarm	1 beep POWER ON; depress power button >3s 3 beeps POWER ON W/AUTO OFF disabled; short beeps @ 1s interval 5s before power off AUTO POWER-OFF; continuous beep sound OVER RANGE
Auto Power-off	Power turns off automatically after 5 min; [A.OFF] is displayed whenever this feature is disabled
Operating Env.	Temperature 50-100°F (10- 40°C); humidity 0-60% RH (non-condensing)
Power	9V, 6F22Y manganese battery
Battery Life	Approximately 30 hours
Enclosure	Conductive resin (ABS)
Dimensions	4.8L x 2.9W x 1.0D in. (123 x 73 x 25 mm)
Weight	6 oz (170g)
Warranty	Two year limited warranty

Ordering Information

91-FMX-004	FMX-004 Hand-Held Fieldmeter with Charge Plate
33-2004	Analog output cable and bracket kit



Special Features

The FMX-004 measures both positive and negative polarity charges up to ±30 kV (30,000V) at a distance of 1". Results are simultaneously shown numerically and in bar graph format on the unique multi-colored display that also displays battery charge status. Power on/off, zero adjustment, Ion Balance (MODE) and hold are all push button operation. The hold button allows the display to retain the static charge reading. This is especially useful where display is difficult to see during measurement.

Two LED guide lights help position the fieldmeter at the right distance from a charged test object. The conductive case and ground snap facilitate grounding for accurate measurement. The circuitry of the FMX-004 has been designed to make measurements in areas using air ionization.



Analog Output

The FMX-004 has an optional cable and bracket kit available. The bracket enables the fieldmeter to be mounted for continuous reading collection.

The analog output cable allows you to feed an output signal to a PLC, data acquisition card, data logger, chart reader or other device.

Maintenance

As with most measuring devices, calibration is necessary for optimal performance. We recommend recalibrating the FMX-004 once a year. Simco-Ion offers recalibration services that includes a certificate with or without data.

SIMCO ION™
An ITW Company

DS-FMS004_V2 - 10/14
© 2014 Simco-Ion
All rights reserved.

Simco-Ion
Technology Group
1601 Harbor Bay Pkwy, Ste 150
Alameda, CA 94502
Tel: 800.367.2452 (in USA)
Tel: 510.217.0600
info@simco-ion.com
www.simco-ion.com