

# MONROE 282M

Pocket-sized, easy-to-use 20 kV/cm non-contacting static meter which produces consistently accurate readings.

The Monroe 282M 20 kV/cm range digital Stat-Arc™ fieldmeter is a pocket-sized, non-contacting static meter for consistently accurate readings. Simply hold the instrument so the range finder LED beams from a non-pulsing circle indicating you're at exactly the right distance from the target for readings up to 2000 V.

## PRODUCT HIGHLIGHTS

- 20 kV/cm range
- LED pulsed beam range finder identifies calibrated distance from the surface
- Exclusive Auto-Zero circuit
- Hold button captures transient readings
- Chopper-stabilized measurement technique works in the presence of ionization
- Recorder output and 40-hour battery
- Drift-free accuracy even in ionized environments
- Optional Charge Plate System for testing ionization systems

## TYPICAL APPLICATIONS

- Monitoring "static-free" electronic workstations
- Measuring static build-up on webs in converting, laminating, and printing operations
- Checking grounds and bonding in dry particle/power transport systems



## HIGHLIGHTS

### Normal Range

0 to ±19.99 V @ 1 in

### Accuracy

±5% of reading, + zero offset, ±2 LSD

### Response Time

80 to 100 msec, 10 to 90%

# MONROE ELECTROSTATIC FIELDMETER 282M

## TECHNICAL DATA

Performance Specifications			
Display	LCD 3 ½-digit with auto polarity readout, with hold and low battery indicators		
Range	0 to ±19.99 V at 1 in		
	For reading voltages 20kV and higher, increase the distance to the target per the following:		
	kV	Distance	Multiply Reading By
	20 kV	1.0 cm	x1
	40 kV	2.5 cm	x2
	80 kV	10 cm	x4
200 kV	25 cm	x10	
Accuracy	±5% of reading, + zero offset, ±2 LSD		
Analog Output Amplitude	1 V signal denotes 10 kV reading at 1 cm for high impedance loads		
Response Time	Typical 80 to 100 msec 10 to 90%		

Mechanical Specifications	
Dimensions (L x W x H)	6.1 x 10.7 x 2.3 cm (2.4 x 4.2 x 0.9 in)
Weight	0.14 kg (0.31 lb) with battery
Jack Type	Accepts standard 2.5 mm (3/32 in) monaural phone plug

Electrical Specifications	
Battery	9 V NEDA #1604 or equivalent
Battery Life	40 hours of normal use, with alkaline battery

Environmental Specifications	
Operating Temperature	0 to 50°C (32 to 122°F)
Relative Humidity	0 to 85% noncondensing
Ionized	Unaffected by ionized equipment

## EASY-TO-USE OPERATION

1. Turn the instrument ON.
2. Discharge your body by touching a grounded metal object.
3. Point the aperture toward a grounded object and press the ZERO button.
4. Aim the aperture toward the target surface at a distance of 1 cm. Adjust the distance until the flashing beams of the LEDs in the instrument converge. Read the voltage and polarity of the charged surface on the meter display.

For additional measurements, repeat step four. To read the voltages, start at a greater distance to the target as given under specifications.

### Maintenance

The battery should be replaced annually, whenever you plan an extended period of unattended monitoring, or whenever "BAT" appears on the display for more than an instant. To obtain accurate and drift-free readings, the sensor plate and especially the area around the aperture must be kept absolutely clean at all times. Never touch the aperture with anything—not even a cotton swab.



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## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

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