

MONROE 282L

Pocket-sized, easy-to-use, 2000V range non-contacting static meter designed for sensitive, low-voltage measurements with consistently accurate readings.

The Monroe 282L 2000V range Digital Stat-ArcTM 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

- 2000 V range
- 1 V resolution
- 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
- Checking grounds and bonding in dry particle/power transport systems
- Testing ionizer performance using optional charged plate adapter Monroe 282CPS



HIGHLIGHTS

Normal Range

0 to ±1999 V @ 1 in

Accuracy

 $\pm 5\%$ of reading, + zero offset, ± 2 LSD

Response Time

10 msec, 10 to 90%

MONROE ELECTROSTATIC FIELDMETER 282L

TECHNICAL DATA

Performance Specifications			
Display	LCD 3 ½-digit with auto polarity readout, with hold and low battery indicators		
Range	0 to ±1999 V at 1 in		
	Voltages over 2.0kV and higher may be measured by increasing the distance to the target:		
	kV	Distance	Multiply Reading By
	0 to 4000	4.0 in	2
	0 to 8000	8.5 in	4
Accuracy	±5% of reading, + zero offset, ±2 LSD		
Analog Output Amplitude	1 V signal denotes 1.0 kV reading at 1 in for high impedance loads		
Response Time	Typical 10 msec 10 to 90%		

Mechanical Specifications		
Dimensions (LxWxH)	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 in. 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.

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 touchthe aperture with anything—not even a cotton swab.





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

Specifications are subject to change without notice. Not responsible for errors or omissions. ©2020 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy®, Monroe Electronics®, Stat-Arc $^{\text{TM}}$, and AE® are U.S. trademarks of Advanced Energy Industries, Inc.



For international contact information, visit advancedenergy.com.

sales.support@aei.com +1.970.221.0108