

20kV/cm Range Digital Stat-Arc

model **282M**

Description

The 20kV/cm Digital Stat-Arc, Model 282M is a pocket-sized, non-contacting static meter which produces consistently accurate readings, and is easy to use.

Features:

- 20kV/cm Range
- Pulsing-beam range finder for always obtaining the correct reading
- Exclusive Auto-Zero circuit
- HOLD button captures transient readings
- Recorder output and 40-hour battery
- Drift-free accuracy even in ionized environments
- Charged plate adapter available

The right answers anywhere - easier than ever

With the Model 282M, accuracy is unquestioned. Simply hold the instrument so the range finder LED beams form a non-pulsing circle indicating you're at exactly the right distance from the target for readings up to 20 kV/cm. Additionally, Monroe's chopper-stabilized circuitry is immune to ionization, unlike ordinary static locators. Zeroing is push-button simple.

Designed for optimal performance as well as low cost you can't afford *not* to keep the Model 282M handy for:

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



Simple to use:

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 only.

To freeze the display, press the HOLD button. 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 in 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.

Specifications:

Display: LCD, 3½-digit with auto polarity readout, with HOLD and LOW BATT indicators

Range: 0 to $\pm 19.99\text{kV}$ at 1.0 cm

For reading voltages 20kV/cm and higher increase the distance to the target per the following chart.

kV	Spacing	Multiplier
20kV	1.0 cm	x 1
40kV	2.5 cm	x 2
80kV	10 cm	x 4
200kV	25 cm	x 10

Accuracy: $\pm 5\%$ of reading, + zero offset, ± 2 lsd

Analog output Amplitude: 1 V signal denotes 10kV reading at 1 cm for high impedance loads

Response Time: Typ. 80 - 100 msec 10 - 90%

Jack Type: Accepts standard 3/32 inch (2.5mm) monaural phone plug

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

Physical: (L x W x H): 2.4 x 4.2 x 0.9 inches (6.1 x 10.7 x 2.3 cm) Weight: 5 oz (0.14kg) with battery

Operating Environment: 0-50°C, 0-85% RH (non-condensing), unaffected by ionized equipment

Calibration:

Monroe Electronics instruments are 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 will be happy to perform the calibration for you or refer you to one of our Authorized Service Organizations.

Warranty:

Monroe Electronics, Inc., warrants that each instrument and sub-assembly manufactured by them shall be free from defects in material and workmanship for a period of two years after shipment from the factory. This warranty is applicable to the original purchaser only.

The Monroe Electrostatic & ESD product line is now owned by Advanced Energy and managed by TREK in Lockport, NY.