

Description

The Digital Stat-Arc 2, model 282IS and Digital Stat-Arc 3, model 282A-1 are pocket-sized, non-contacting static meters which produce consistently accurate readings, and are easy to use.

Features:

- 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
- Model 282IS - Intrinsically safe (IS) meter UL Certification Class I Groups A, B, C, D and Class II Groups E, F, G

The right answers anywhere - easier than ever

With the Model 282, 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. 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 282 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
- **Testing** ionizer performance using optional charged plate adapter Model 282CPS



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 inch. 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 ± 19.99kV at 1 inch.
 Voltages over 20kV and higher may be read by increasing the distance to the target
- | kV | Distance | Multiply reading by |
|------|------------|---------------------|
| 0-40 | 4.0 inches | 2 |
| 0-80 | 8.5 inches | 4 |
- Accuracy:** ±5% of reading, + zero offset, ±2 lsd
- Analog output Amplitude:** 1 V signal denotes 10kV reading at 1 inch 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, o 85% RH (non-condensing), unaffected by ionized equipment
- 282IS Industrial Approval and certification:** CE mark approval
 UL Certification Class I Groups A, B, C, D, and Class II Groups E, F, G, when powered by 9-volt carbon zinc or zinc chloride battery NEDA 1604 or NEDA 1604D.
 UL Certification for Class I Groups C and D only when powered by 9-volt alkaline NEDA 1604A.

For UL approved, Intrinsically Safe meters, customer must specifically request model 282IS when placing order.

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 are happy to recalibrate your instrument for you at a reasonable cost, or provide information and procedures on calibration upon request.

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 finest ESD instrumentation and support:

For more than 40 years - ever since we invented the feedback--nulled electrostatic voltmeter, Monroe has been the technology and quality leader in electrostatic detection and measurement instrumentation. Today we offer the world's most complete array of fieldmeters, voltmeters, and resistivity meters. Our customers include the leading makers of photocopiers and laser printers, converters and microelectronics worldwide.

We know you need quality support as well as quality products. We pride ourselves on providing our customers with the most knowledgeable applications and installation support — as well as superior customer service.

How can we help?

Call or fax All-Spec Industries' Sales Department

All-Spec Industries

www.all-spec.com
sales@all-spec.com

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 FX: 800-379-9903

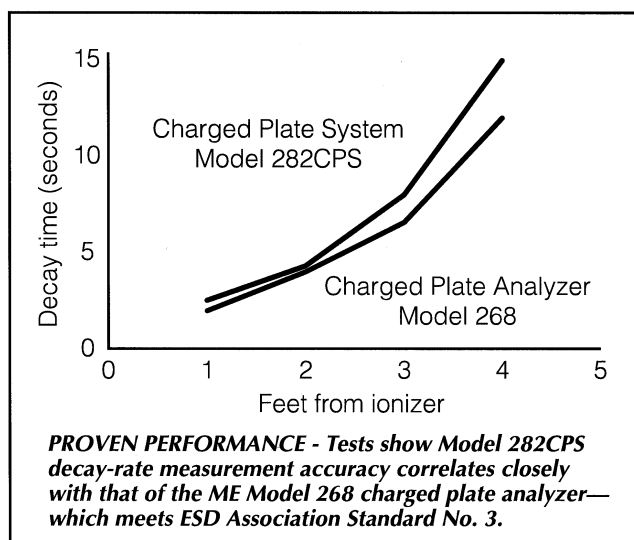


Features:

- Portability at a low cost
- Exceeds current requirements of ESD Assn. SP3.3 for periodic Verification of Air Ionizers
- Performs go/no-go, balance, and decay tests
- Includes dual polarity charger, adapter, and carry case
- Attaches to Model 282 fieldmeter

The fast, easy, low cost way to check air ionizer performance

The Model 282CPS makes it practical to check your ionizers every shift. This system is an option for the Monroe Electronics Model 282 fieldmeter. So you get the accuracy and convenience you can depend on at a price you can't pass up.



Easy to use

Now it's simple to make sure any ionizer is doing its job.

Go/no-go check

1. While away from any ionized airflow, turn the Model 282 fieldmeter on and check "zero" reading.
2. Slide the plate assembly onto the Model 282 fieldmeter.
3. Select charger polarity by grounding the opposite terminal. (Ground "-" to select "+").
4. To charge the plate adapter, place it in contact with the appropriate charger terminal.
5. Position the fieldmeter with the plate adapter in the ionizer airflow. The meter should rapidly drop from 1100 V to zero.

Note: All tests should be performed while wearing a wrist strap to ensure a proper ground.

Decay rate check

Follow the steps above, but connect the fieldmeter to chart recorder, or use a stopwatch to measure the time required for the voltage to decay from $\pm 1.00\text{kV}$ to $\pm 0.10\text{kV}$.

Balance check

Turn on the fieldmeter with the plate adapter attached. Point it into the ionizer airflow, check for an average reading of zero.

An offset reading indicates an unbalanced ionizer.

Specifications:

Model 96138 Plate Assembly

Plate

Capacitance: 13 picofarads \pm 2 picofarads

Range: 0 to \pm 2 kV

Grounding: Connection through conductive case of Model 282 fieldmeter

Weight: 1.5 oz

Model 280-1 Charger

Output: 1100 VDC normal, $<1\mu\text{A}$ max

Output terminals:

Two acorn buttons labeled for “+” and “-”. To select, ground opposite terminal.

Battery: 9-volt Eveready #216 or equivalent, NEDA #1604

Battery life: 40 hours

Temp. Range: $+10^{\circ}$ to $+30^{\circ}$ C ($+50^{\circ}$ to $+80^{\circ}$ F)

Relative humidity: 10% to 80% non-condensing

Dimensions: 3.75x2.88x1inch
(9.53x7.32x2.54 cm)

Weight: 2.8oz (79 gm)

Model 282A Digital Stat-Arc™ 3 or 282IS Digital Stat-Arc 2 for Hazardous locations (not included)
Refer to individual data sheets.

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The finest Electrostatic instrumentation and support:

For more than a half-century - ever since we invented the feedback-nulled electrostatic voltmeter, Monroe has been the technology and quality leader in electrostatic detection and measurement instrumentation. Today we offer the world's most complete array of fieldmeters, voltmeters, and resistivity meters. Our customers include the leading makers of photocopiers and laser printers, converters and microelectronics worldwide.

We know you need quality support as well as quality products. We pride ourselves on providing our customers with the most knowledgeable applications and installation support — as well as superior customer service.

How can we help?

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