

# Charged Plate System Model 282CPS

- Portability at a low cost
- Correlates closely to charged plate monitor
- 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. Snap the plate assembly onto your Model 282 fieldmeter.
2. While away from any ionized airflow, turn the fieldmeter on.
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.



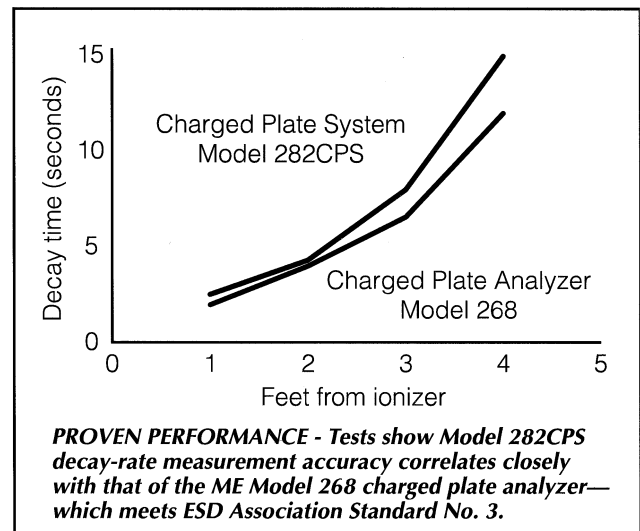
### Decay rate check

Follow the steps above, but connect the fieldmeter to chart recorder, or use a stop watch to measure the time required for the voltage to decay from  $\pm 1.00$  kV to  $\pm 0.10$  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 in reading indicates an unbalanced ionizer.



# Charged Plate System Model 282CPS

## Specifications

### Model 96138 Plate Assembly

**Plate Capacitance:** 13 picofarads  $\pm$ 2 picofarads  
**Range:** 0 to  $\pm$ 2 kV, higher voltages may be measured  
**Grounding:** Connection through conductive case of Model 282 fieldmeter  
**Weight:** 1.5 oz

### Model 280-1 Charger

**Output:** 1100 VDC nominal,  $<1\mu$ A max  
**Output terminals:** Two acorn buttons labeled for "+" and "-". To select, ground opposite terminal.  
**Load regulation:** Better than 8% NL to FL where FL=10 G $\Omega$   
**Battery type:** 9-volt Eveready #216 or equivalent, NEDA #1604  
**Battery life:** 40 hours  
**Temperature range:** +10 $^{\circ}$  to +30 $^{\circ}$  C (+50 $^{\circ}$  to +86 $^{\circ}$  F)  
**Relative humidity:** 10% to 80% non-condensing

### Dimensions

**(H x W x D):** 3.75 x 2.88 x 1 inch  
(9.53 x 7.32 x 2.54 cm)

**Weight:** 2.8 oz (79 gm)

### Model 282 Digital Stat-Arc™ 2 (not included)

**Display:** LCD, 3½-digit with auto polarity readout. Also indicates HOLD and LOW BATTERY  
**Range:**  $\pm$ 0-19.99 kV at 1 inch  
Voltages of 20 kV and higher may be read by increasing the distance to the target:  

kV	Distance	Multiply reading by
0-40	4.0 inches	2
0-60	6.5 inches	3
0-80	8.5 inches	4

**Accuracy:**  $\pm$ 5% of full scale

### Analog output

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

**Amplitude:** 1 volt signal represents 10 kV reading at 1 in for high impedance loads

**Impedance:** 10 k

**Response time:** Typ. 80-110 msec

**Battery:** 9-volt Eveready #216 or equivalent, NEDA #1604. 40 hours of normal use, with alkaline battery

### Dimensions

**(L x W x D):** 2.4 x 4.2 x 0.9 inch  
(6.1 x 10.7 x 2.3 cm)

**Weight:** 5 oz (142 gm) with battery

**Operating environment:** 0-50 $^{\circ}$  C, 0-85% RH (non-condensing), unaffected by ionized environment

## The best warranty in the business

Since Monroe Electronics offers the finest, most complete line of ESD instrumentation, it's appropriate that we back our products with an equally superior warranty: 2 years on all parts and labor.

## The finest ESD instrumentation and support

For more than 30 years we have been the technology and quality leader in electrostatic detection and measurement instrumentation—ever since we invented the feedback-nulled electrostatic voltmeter. Today we offer the world's only complete array of fieldmeters, static locators, voltmeters, resistivity meters and power supplies. Our customers range from the leading makers of photocopiers and laser printers to converters and microelectronics manufacturers worldwide.

But we know you need quality support as well as quality products. That's why we drive ourselves to provide the most knowledgeable applications and installation support—as well as superior customer service.

It's no accident that our distributors are among the finest in the industry. It's a natural match.

## How can we help?

Contact your Monroe Electronics dealer for price and delivery information on this or other ME products, or to schedule a no-obligation demonstration at your convenience. For the name of your nearest dealer, or for technical or applications assistance, contact Monroe Electronics at the address and phone numbers below.

**ME MONROE ELECTRONICS**  
e-mail: [electrostatics@monroe-electronics.com](mailto:electrostatics@monroe-electronics.com)  
<http://www.monroe-electronics.com>



100 HOUSEL AVENUE  
LYNDONVILLE, NY 14098  
800 821 6001  
716 765 2254  
FAX 716 765 9330