

## NEW•Product

### Features:

- Innovative non-contacting electrometer provides tests to unprecedented low voltage with unmatched stability
- Fully configurable operating parameters
- Soft keys for highly intuitive programming
- Manual and automated testing of Decay and Balance
- Internal storage for up to 1500 tests, 500 locations and 4 test protocols
- Internal battery for portable operation (also line operated)
- Large, easy to read, high contrast LCD display
- Detachable 6" x 6" plate (Optional plate 1" X 1" plate available)
- RS232 interface
- Built in temperature and humidity sensors
- Auto-ranging to 0.1V resolution below 100V
- Compatible with new 288B Graphing Software

### Plate Assembly:

6" x 6" plate assembly includes a detachable ground plane that is used for improved consistency in decay readings. Built in self-test resistor for function confidence check is also incorporated. (Optional 1.0" x 1.0" plate assembly is available.) Small diameter (3 mm) low noise coaxial cable is used for inter-connection to main unit.



### **The Model 288B's easy-to-use, self-contained design simplifies ionizer audits:**

Testing your ionizers is as simple as pushing a button.

The Model 288B is the first Charged Plate Monitor to incorporate a microprocessor and data storage, eliminating the need for a dedicated computer. All test parameters are programmable allowing tests to be optimized and not dictated by equipment limitations. Once programmed, the Model 288B will perform a series of tests automatically: +/- decays, balance, balance peaks, temperature, humidity, time/date are stored and may be reviewed via the display or downloaded to a PC. The PC software (included) permits the user to define and name ionizer locations, test setups and sequences, then upload these to the CPM. All of these features result in a flexible, easy to use instrument that facilitates audits while minimizing errors.

### **Operation:**

The Model 288B performs manual or automatic decay and balance tests on critical ionization equipment and stores the results and averaged decay times for up to 500 workstations. Temperature and relative humidity are displayed real-time and recorded with the test data.

All pertinent test information is presented on a large format LCD display. Custom protocols and personal workstation definitions can be uploaded and results downloaded for analysis via a bi-directional RS-232 link.

In DECAY mode the plate is charged to a predetermined voltage from  $\pm 10$  to  $\pm 1000$ . During test, the plate will discharge toward zero in the presence of ionization. The elapsed time of decay between the start voltage and a preset stop voltage, as low as zero volts, is displayed.

In BALANCE mode, isolated plate voltage, test duration and + / - peak voltages are displayed.

Self-tests include battery check, tests for functional errors and a built-in decay self confidence check.

## Charge Plate Monitor model 288B

### Specifications:

All specifications are referred to plate voltage unless otherwise specified.

|   |  |
|---|--|
| Display   | 240 x 64 character/graphic   |
| Voltage - Accuracy Resolution   | 3½ digit display (Decay and Peak reading)<br>±0.1% of reading ±1 lsd<br>1 volt for readings > 99 volts<br>0.1 volt for readings < 100 volts                      |
| Time - Accuracy Resolution  | 4 digit display<br>0.1% of reading ±1 lsd<br>0.1 second for readings < 1000 seconds<br>1 second for reading > 999 seconds  |
| Electrometer Dynamic range Follower error Speed of Response Bandwidth Noise   | ±1200 volts<br>< 10 mV<br><10 msec for 1 kV to 0 volts (90%-10%)<br>-3db @ 1Khz 20V <sub>p-p</sub><br>-3db @ 10Hz 2000V <sub>p-p</sub><br>< 12 mV <sub>rms</sub> |
| Monitor output Accuracy Output Impedance                                      | Divide by 200<br>0.1% of reading ±12 mV<br>1K ohm  |
| Start Voltages Range Resolution Accuracy                                      | 1000 volts ±0.3% Standard<br>±10 to ±1000 volts<br>Settable to 1 volt<br>0.3% of setting ±2.5 volts  |
| Stop Voltages Range Resolution Accuracy                                       | 100 volts ±3% Standard<br>0- ±995 volts<br>Settable to 1 volt<br>0.3% of setting ±2.5 volts  |
| Charge Voltage Range Resolution Accuracy                                      | 10 to 100 volts above the start voltage<br>Settable to 1 volt increments<br>0.3% of setting ±2.5 volts   |
| Charge Plate Capacitance Zero Drift Self Discharge                            | 20 pF ±10%<br>< 100 mV/sec (no incident ion flow)<br>< 200 mV/sec  |
| Peak Detector (Balance Test) Bandwidth  | <10HZ  |
| Temperature Sensor Range Accuracy   | 0 - 50°C<br>±2°C typ   |
| Humidity Sensor Range Accuracy  | 10% - 80% RH @ 25°C<br>±5% typ   |
| Operating Temperature Humidity Battery life Charge Time Power Voltage Wattage | 5°C to 35°C<br>to 80%, non condensing<br>6 hours<br>< 8 hrs to > 90% capacity<br>90 - 250 VAC 50/60 Hz<br>< 12 watts operating                                   |
| CPM Size Weight   | 11" x 9" x 6" (280 x 229 x 152 mm)<br>12½lb. (5.7kg)   |

### Optional Carrying Case Available

[www.monroe-electronics.com](http://www.monroe-electronics.com)  
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800-821-6001 | 585-765-2254 | fax 585-765-9330

### 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 Electrostatic 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.

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Contact your Monroe Electronics representative for price and delivery information on this and other ME products, 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 directly at the address and numbers below.

