

Ionizer Performance Analyzer



Figure 1. Ionizer Performance Analyzer

Description

The Model 42635 performs manual or automatic decay and balance tests for periodic verification of ionization equipment. It then stores the results and averaged decay times for up to ten manual tests and up to ten complete test sequences. Temperature and relative humidity are displayed real-time and recorded with the test data.

In DECAY mode a built-in high voltage generator charges the plate to over 1050 volts. During test the plate will discharge toward zero in the presence of ionization. The elapsed time of decay between 1000 volts and 100 volts is displayed.

In the balance mode, isolated plate voltage, test duration and 100 volts is displayed.

Self-tests include battery check and test for functional errors.

Specifications:

Feature 1:

All-in-One Instrument-Measures, displays and stores voltage, decay time, temperature and humidity.

Feature 2:

Exceeds current requirements of ESD Assn. DSP3.3 for Periodic Verification of Air Ionizers.

Feature 3:

Tests balance and decay.

Operating Modes:

Manual or Automatic Testing

Display:

2 x 16 LCD, >5 updates per second

Size:

1.7" x 4" (≈10.6 inches periphery)

Capacitance:

Approximately 25pF

Self-discharge Rate:

<10% of full scale in 200s

Range:

± 1,250V, 1V resolution

Accuracy:

± 5% of reading, ± 2% typical

Drift:

<± 4V in 90s, ± 2V typical

Output:

± 1,100 volts, selectable polarity

Maximum Time Measured:

200.0s maximum

Resolution:

0.1s resolution

Trip Points:

Fixed 1000V and 100V

Applicable Standards:

ESD Assn. DSP3.3

Environmental

Temperature Range:

25°C, ± 10°C

Power Requirements:

9 volt NEDA #1604A or equivalent alkaline

Size:

1.7" x 4" (≈10.6 inches periphery)

Weight:

11lb, 6 oz. (0.63 kg)

Available Includes carrying case, instruction manual and grounding

Accessories:

lead

Additional Information:

Integrated Temperature and Humidity Sensors:

Humidity ± 5% typ. from 10% to 90% RH @ 25°C

Temperature ± 2°C

Battery Life- >40 hour life or >1300 charge cycles. Longer life may be achieved by using 9-volt lithium.

Limited Warranty

ESD Systems.com expressly warrants that for a period of one (1) year from the date of purchase, our Ionizer Performance Analyzer will be free of defects in material. Within the warranty period, the material will be tested and replaced at our option, free of charge. Call Customer Service at 508-485-7390 for a Return Material Authorization (RMA) and proper shipping instructions and address. You should include a copy of your original packing slip, invoice, or other proof of purchase date. Any material under warranty should be shipped prepaid to the ESD Systems.com factory. Warranty repairs will take approximately one week.

Warranty Exclusions

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