

Botron B48282C Technical Data Sheet



Overview:

Designed as an add-on for the B48282C will charge the B48282, permitting it to test and monitor the balance of ionization devices. Running off a 9-volt battery, the B48282C has the ability to output both positive and negative voltage that can be transferred to the adapter plate.

OPERATION

Plate	
Plate Capacitance:	13 picofarads \pm 2 picofarads
Range:	0 to \pm 2 kV
Grounding:	Connection through conductive case of B482482.
Weight:	1.5 oz
Electrostatic 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° to +30° C (+50° to +80° F)
Relative humidity:	10% to 80% non-condensing
Dimensions:	3.75x2.88x1inch (9.53x7.32x2.54 cm)
Weight:	2.8oz (79 gm)

PART NUMBERS

B48282C Electrostatic Charger & (Plate shown in thumbnail)
B48282KIT Charger, Meter (B48482) and Plate

Product Notes and Features

- Portable
- Performs go/no-go, balance and decay tests
- Attaches to B48282 field meter



OPERATION

Go/no-go check

1. Away from any ionized airflow, turn the B48282 field meter on and check zero reading.
2. Attach plate assembly to top of the B48282 field meter.
3. Select polarity of charger by grounding the opposite terminal. (Ground "-" to select "+").
4. To charge the plate adapter, contact it with the appropriate charger terminal.
5. Place the field meter with plate attached into the ionizer airflow. The meter should rapidly drop from 1100 V to zero.

Note: A wrist strap should be worn during tests to ensure a proper ground.

Decay rate check

Follow the steps above, but connect the B48282 field meter to a 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 B48282 field meter with the plate adapter attached. Point it into the ionizer airflow, check for an average reading of zero. Offset readings indicate an unbalanced ionizer.

CALIBRATION

Botron's B486288 are factory-calibrated prior to shipment. Recalibration should be performed annually, or more frequently if specified by contract or company policy. For warranty purposes all calibrations and/or repairs on unit should be returned to Botron to avoid warranty issues.