

User's Manual

Charged Plate Set

7100.EFM51.CPS



Wolfgang Warmbier GmbH & Co. KG
Systeme gegen Elektrostatik
Untere Gießwiesen 21
D-78247 Hilzingen
www.warmbier.com



Charge Plate Set EFM51.CPS

The EFM51 can be equipped with the "Charge Plate Set" to be used as Charged Plate Monitor, to verify air ionizer's efficiency.

The capacity (20 pF) of the charge electrode complies with the standard EN 61340-4-7, but the dimension 75 x 150mm is smaller as defined in the standard. For measurement in compliance with IEC 63140-4-7 you can use the CPM 74.

With the CPS, however reproducible verification measurements can be performed.

It measures the decay time from +1.000V to +100V or -1.000V to -100V with its integrated start-stop timer. The plates have to be charged manually via the handheld high voltage generator.

Operating Instructions EFM51.CPS

This manual describes the additional functions of the EFM51 to measure as Charged Plate Monitor. Please take attention of the EFM51 user's manual as well.

■ Preparation for measurement

- Plug the EFM51 instrument into the conductive base
- Bolt on the grounding plate and pin up the charging plate
- Connect the charger with the base and ground the base using the supplied cables
- Switch the EFM51 on and wait until "Dist. = 2 cm" is displayed
- Press and hold the "function/on"-key /approximately (2 seconds) until "change cm" will appear. The preselected distance in cm is displayed in the first line. Pressing the "function/on"-key changes the mode to 2 cm => 5 cm => 10 cm => 20 cm => E-Fieldmeter => **CPS Mode** => Max. Value => 1 cm
- After selecting the CPS Mode, the instrument is ready for the Charge Plate Set test

■ CPS - Measurement

- To apply a positive or negative Charge of 1100 volts to the plate, the corresponding high voltage contact of the charger has to be touched with the charge plate while pressing the "PRESS" button on the charger.
- The decay timer of the EFM51 starts counting when the plate's voltage drops to 1000V and will stop counting when the value will be below 100 volts.

- The counters resolution is 0,1 seconds. The elapsed discharge time and the current plate voltage are displayed.
- After a key-press on the EFM51 the current offset voltage is hold.
- To start next measurement press once again.

Includes

- Electrostatic Field Meter EFM51 including 2 cm distance guides
- Charger
- 9V rechargeable batteries
- Battery charger
- Conductive CPS-base
- Charging plate set
- Grounding cable 0,5m und 1m
- Crocodile clip
- Conductive carrying case
- User's manual in German and English
- Calibration Certificate "German and English"

Mounting the plates

