

# MANUAL

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## Charge Plate Set CPS 022

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For Electrostatic Field Meter EFM 022

## Product Description

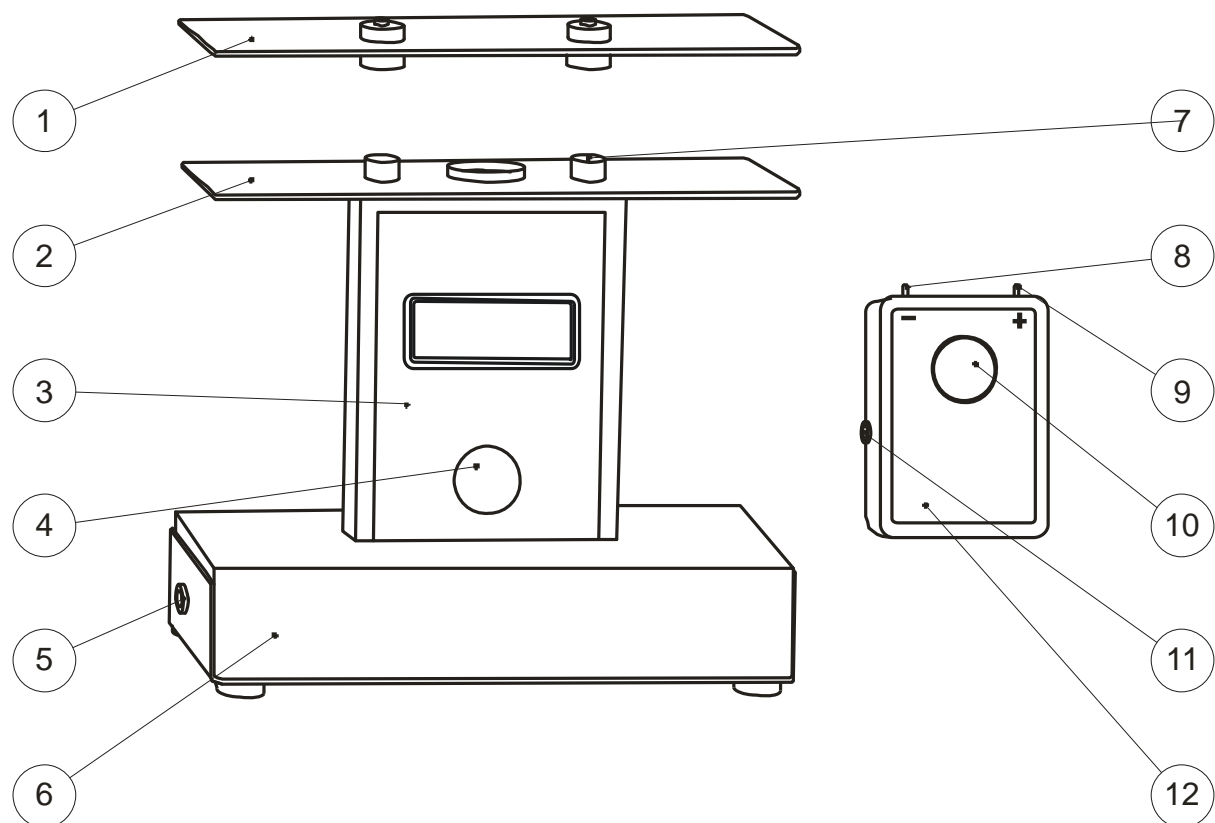
In combination with the Charge-Plate-Set CPS 022 the EFM 022 becomes a Charge-Plate-Monitor suited to supervise air ionizers according to EN 61340-5-1 and EOS/ESD S.3.1.

The charge electrode's capacity<sup>1</sup> corresponds to the above-mentioned norms, but not its dimensions<sup>2</sup>. Although reproducible measurements can be performed, for standardized measurements the Kleinwächter Charge Plate Monitor CPM 374 has to be used.

The device determines the discharging time from +1.000V ... +100V or -1.000V ... -100V with its integrated timer. Charging is performed by an external high voltage converter.

**Kindly note that** in CPS mode only voltages < 2000V are displayed!

## Legend



- |   |                      |    |                     |
|---|----------------------|----|---------------------|
| 1 | Field plate          | 7  | Mounting screw      |
| 2 | Grounding plate      | 8  | Negative pole       |
| 3 | EFM 022              | 9  | Positive pole       |
| 4 | Button «function/on» | 10 | Button              |
| 5 | Grounding connector  | 11 | Grounding connector |
| 6 | CPS socket           | 12 | HV converter        |

<sup>1</sup> 20pF

<sup>2</sup> 75mm x 150mm instead of 150mm x 150mm

## Specifications

### HV converter

<b>Dimensions (L x W x H):</b>	86mm x 64mm x 26mm
<b>Weight :</b>	130g
<b>Charging potential:</b>	> ±1100V
<b>Battery:</b>	9V NiMH battery
<b>Operating time:</b>	Approx. 10h

### Plate capacitor

<b>Dimensions (L x W):</b>	75mm x 150mm
<b>Plate distance:</b>	10mm
<b>Capacity :</b>	20pF ±2pF

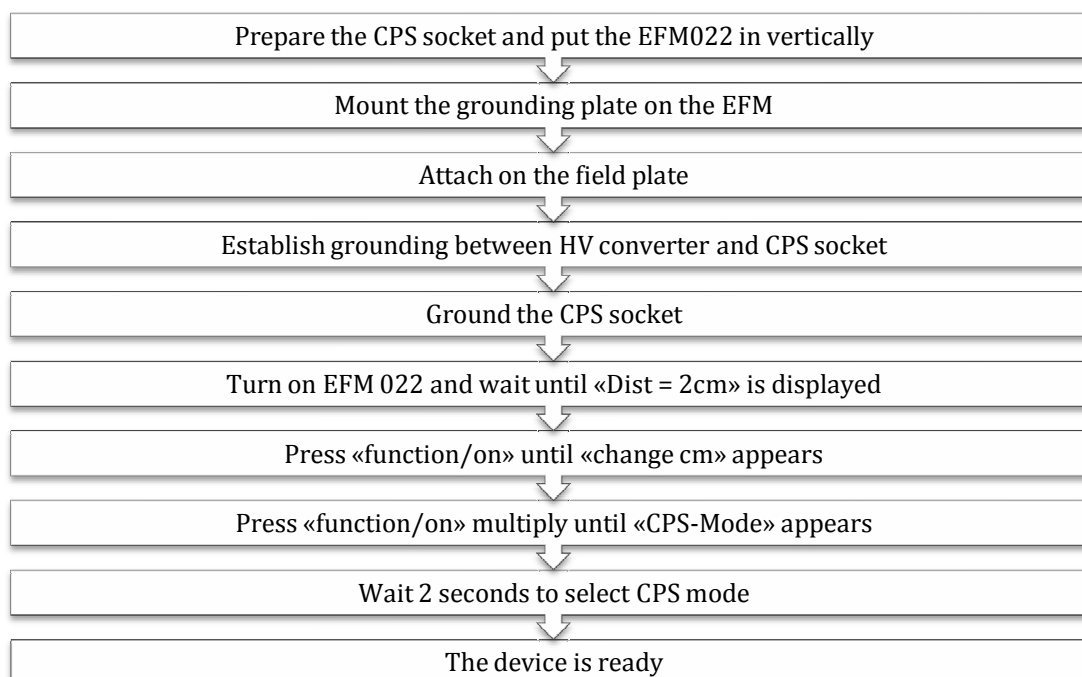
### CPS socket

<b>Dimensions (L x W x H):</b>	75mm x 150mm x 35mm
<b>Material:</b>	Conductive foam / aluminium
<b>Grounding:</b>	2 banana connectors

## Operation instructions

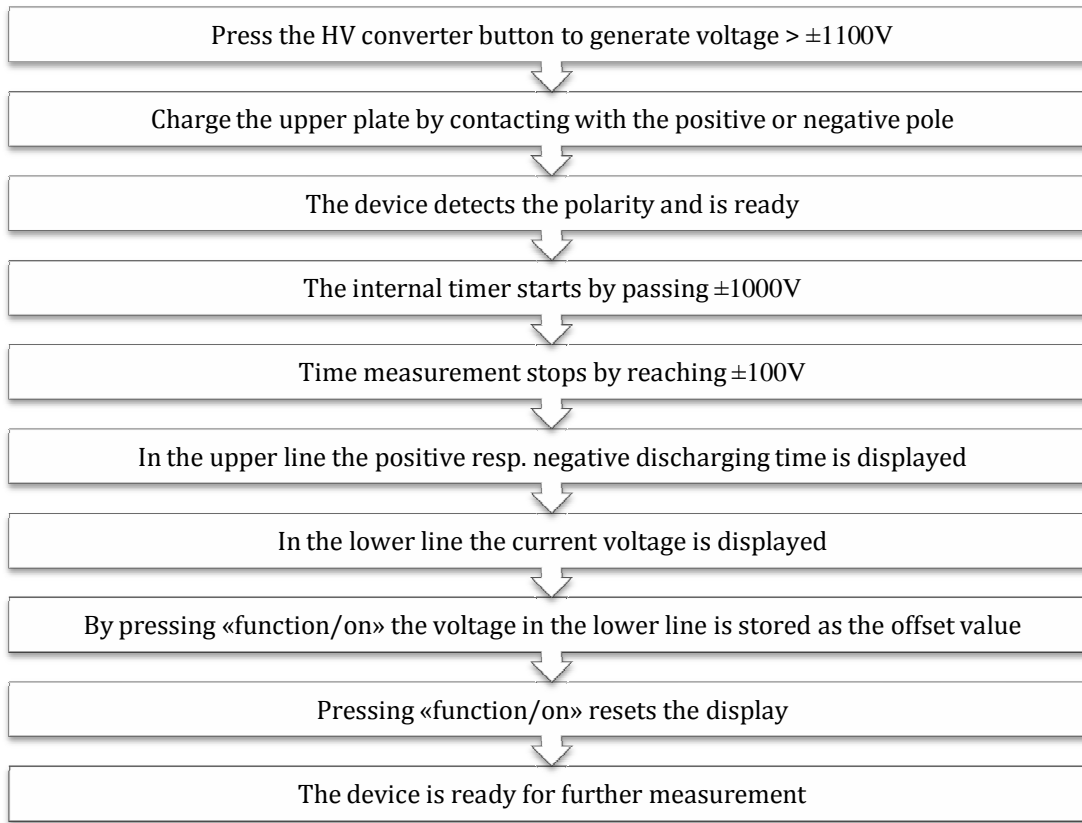
### Preparation of the device

To set the device up the following steps are necessary:



## Measuring procedure

To measure the discharging time follow the steps below:



## Scope of delivery

### CPS022

- HV converter
- 9V-NiMH battery
- Plug-in charger EC109
- CPS socket
- Plate capacitor
- Grounding cable 1m und 1,5m
- Alligator clip
- Carrying case

### EFM 022 CPS

Same as CPS 022, but additionally with

- EFM 022
- Two 9V-NiMH-batteries
- 2 spacers 2cm