

MANUAL



Charge Plate Set CPS 022

Product Description

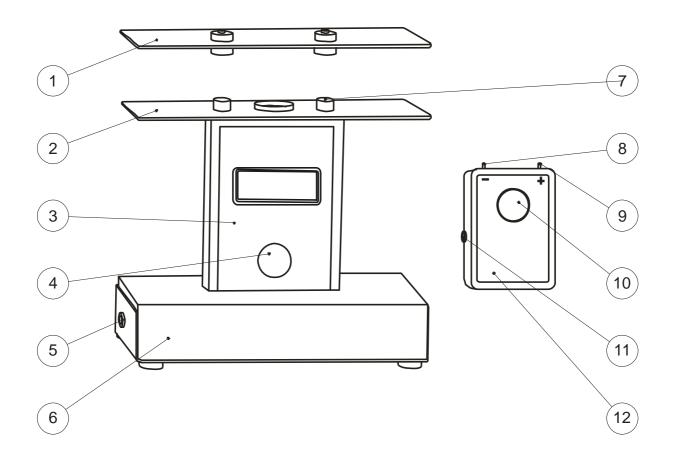
In combination with the Charge-Plate-Set CPS 022 the EFM 022 becomes a Charge-Plate-Monitor suited to supervise air ionizers according to EN 61340-5-1 and EOS/ESD S.3.1.

The charge electrode's capacity¹ corresponds to the above-mentioned norms, but not its dimensions². 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
- **2** Grounding plate
- 3 EFM 022
- 4 Button «function/on»
- **5** Grounding connector
- 6 CPS socket

- 7 Mounting screw
- 8 Negative pole
- **9** Positive pole
- **10** Button
- **11** Grounding connector
- **12** HV converter

¹ 20pF

² 75mm x 150mm instead of 150mm x 150mm

Specifications

HV converter

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

Plate capacitor

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

CPS socket

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

Operation instructions

Preparation of the device

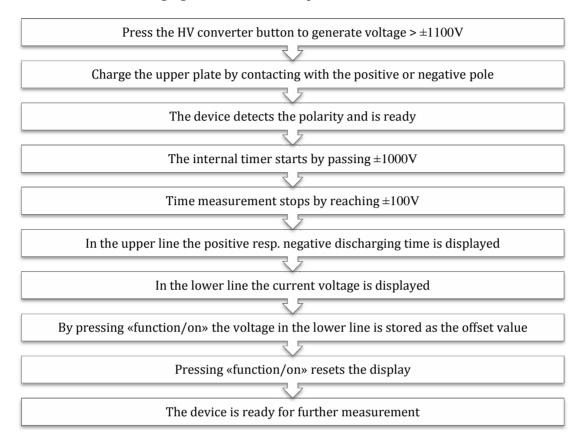
To set the device up the following steps are necessary:

Prepare the CPS socket and put the EFM022 in vertically
Mount the grounding plate on the EFM
Attach on the field plate
Establish grounding between HV converter and CPS socket
Ground the CPS socket
<u> </u>
Turn on EFM 022 and wait until «Dist = 2cm» is displayed
Press «function/on» until «change cm» appears
\checkmark
Press «function/on» multiply until «CPS-Mode» appears
<u> </u>
Wait 2 seconds to select CPS mode
The device is ready

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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