

## Product datasheet

### IONER Faraday Cup Electrometer EL-5030



#### Applications

- Basic aerosol research
- Filter and air-cleaner testing
- Particle concentration measurements
- Instrument Calibration
- Nanotechnology research

## Description

The IONER EL-5030 electrometer is specially designed for the efficient collection of particle charge and is able to measure ultra-low currents generated by ionized gases and electrically charged aerosols from nm up to sub-microns.

The measuring principle is the collection of ions or charged aerosol particles in a filter

inside a Faraday-cage and the detection of the current generated in the compensation of accumulated electrical charges.

Coupled with a DMA, it allows calculating the number concentration of particles or ions.

The EL-5030 has been designed to filter and measure ions and charged particles in gas phase. In addition to the hardware specifications, a specific software is provided for data acquisition.

## Specifications

<b>Measurement rate</b>	± 1fA-10pA
<b>Resolution</b>	0.1 fA
<b>Noise (RMS)</b>	0.5 fA
<b>Aerosol Flow rate*1</b>	10 SLM
<b>Bandwidth</b>	1Hz
<b>Gas inlet connection</b>	1/4"
<b>Gas outlet connection</b>	1/4"
<b>Weight</b>	5 Kg
<b>Dimensions</b>	300×130×210 mm
<b>Power supply</b>	100-240 VAC/50-60Hz
<b>Max Consumption</b>	60W
<b>Operating temperature</b>	5-40oC
<b>Operating humidity conditions*2</b>	5-80%
<b>Communications</b>	Ethernet
<b>Software and Labview® drivers</b>	Included