

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

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