

EL-5020 WIRELESS ELECTROMETER: Ultralow current measurement under high voltage conditions

IONER EL-5020 Compact Electrometer has been especially conceived for the measurement of ultra low currents (fA) at high voltage (kV). Current range covered: from 1 to 10000fA. Connected by a wireless communication protocol (ZigBee) this electrometer is the best option for set-ups where the current signal cannot be transported through a cable. Bias available for higher collection efficiency. Bandwidth of at least 1 Hz frequency allows real time monitoring.



APPLICATIONS

- Electrical measurements with difficult accessibility .
- Measurement of low currents at high voltages.
- Ions and charged aerosols in electric field in the atmosphere.
- Electro spray and electrospinning monitoring.
- Ions in vacuum.



Optional Interface console

SPECIFICATIONS

| | |
|--------------------------------|---|
| Measurement rate | 1fA-10pA (other ranges available on demand) |
| Resolution | 0.1 fA |
| Noise (RMS) | 0.5 fA |
| Communications | Wireless (ZigBee) and Ethernet for the console (optional) |
| Weight | 250 g |
| Software and Labview® drivers | Included |
| Dimensions | 150×70×40 cm |
| Power supply | 100-240 VAC/50-60Hz |
| Max Consumption | 30W |
| Operating temperature | 5-40°C |
| Operating humidity conditions* | 5-80% |
| Bias | Optional (±13V) |
| Battery duration (optional) | 8h |

* Non condensing

OPTIONAL CONFIGURATIONS

| Model | Console | Bias (±13V) |
|---------|---------|-------------|
| EL 5021 | - | Yes |
| EL 5025 | Yes | - |
| EL 5026 | Yes | Yes |

- **Interface console:** To allow controlling of EL-5020 without computer and control software.
- **± 13V bias:** Better measurement as the attraction capacity for charged particles of the EL-5020 will be increased.
- Any other current range is available on demand.