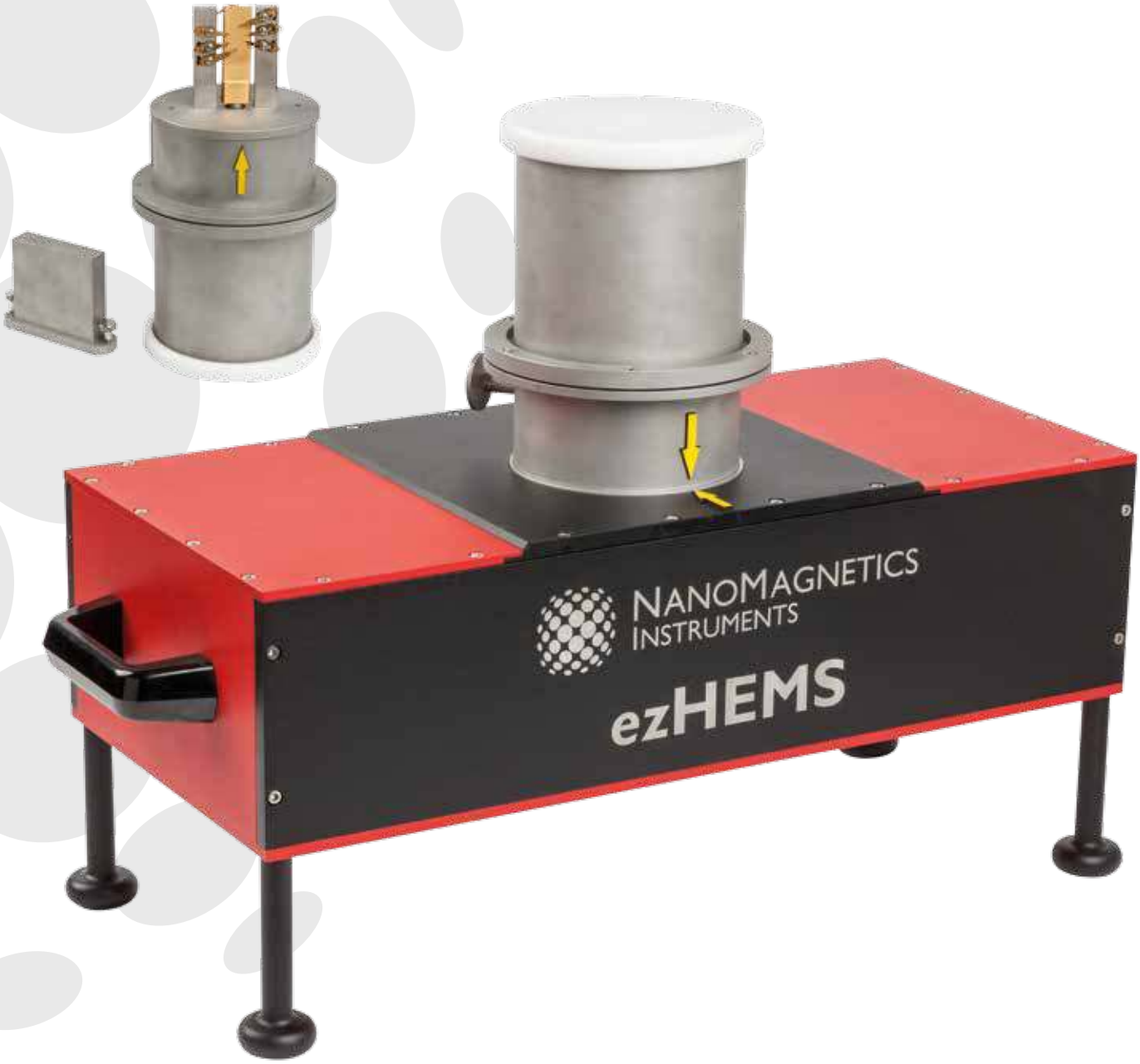
NanoMagnetics Instruments

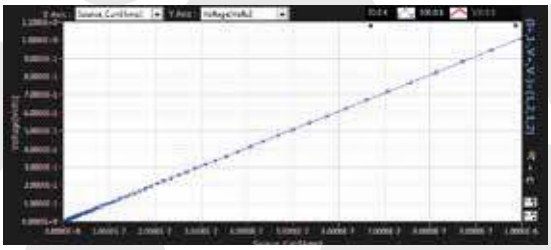
# ezHEMS

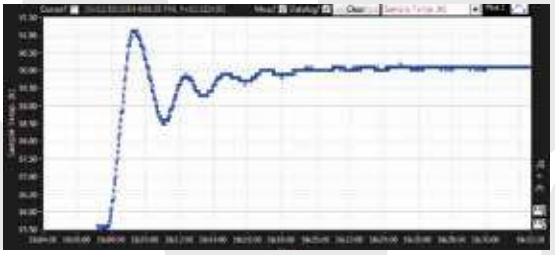
## Hall Effect Measurement System



## Technical Specifications

- Resistivity Measurement Range:$10^{-4}$ to $10^{9}$ Ω-cm (sample dependent)
- Mobility:1 to $10^{7}$ cm2 / Volt-sec (sample dependent)
- Concentration: $10^{7}$ to $10^{21}$ per $cm^{3}$ (sample dependent)
- Current Source: ±2 nA to ±20 mA, ±12 V compliance
- Minimum Hall voltage measurable: 0.1 µV
- Supports Van der Pauw as well as Hall bar shaped samples
- Magnetic Field: 0.6 Tesla or 1 Tesla permanent magnet
- 80-750K temperature range with ±0.2 K resolution.Entire temperature range in a single system.
- Higher ranges are optional
- Pt-100 resistance thermometer, 750 K heater and PID temperature controller
- Computer control through USB interface
- Samples sizes from 5x5 mm to 15 mm x 15 mm & with thickness < 2 mm
- Automated movement of magnets controlled by ezHEMS Control Software





## The ezHEMS Measurement System Software Capabilities:

- Enables data logging and plotting of different measured quantities; I-V curve, resistance, resistivity, sheet resistance,magnetoresistance, carrier conc., Hall mobility, Hall coefficient etc. as a function of sample temperature
- Provides the measured data in tabular form
- LabVIEW™ drivers