SPECIFICATIONS

The HCS 100 System permits the characterization of metallic and semiconducting samples according to the well-known 4-point measurement technique (e.g. Van-der-Pauw, Bar shaped, Greek cross). It measures: electrical resistivity, Hall coefficient, charge carrier concentration and hall mobility.

HCS 100

Input current:	DC ~ 1 nA up to 120 mA / AC ~ 16 µA up to 20 mA
Input impedance:	> 100 GΩ
Compliance voltage:	+/- 12 V
Hall tension:	DC 1 µV up to 2.5V / AC 20 nV up to 1 V
Max. digital resolution:	300 pV
Carrier concentration:	10^{7} ~ $10^{22}cm^{3}$
Resistivity:	10^{-5} ~ $10^{7}\Omega \cdot cm$
Mobility:	1 ~ $10^{7}cm^{2}V^{-1}s^{-1}$
Sample geometry:	Board for samples smaller than 10mm x 10mm From thin films up to bulk samples with 2.5mm in height
Magnetic field.	Hallbach magnet with 0.5T (inner diameter 40mm)
Sensors:	RT up to 500°C