

## Hall Measurement System RH 2035

### Specifications and part list

#### 1. RH 2035 electronic case

Bench top case (310x205x90mm), main power **240 Volt**

**Wight: 1Kg**

including all electronic parts as:  
current source and relais matrix,  
voltage measurement facility,

#### USB interface

Specifications:

**current source:**

usable current range : 1nA - 10 mA  
output voltage : +/- 10V (+/-20V)  
output resistance : typical  $10^{13}$  Ohms  
max. current resolution : 25 pA  
6 current ranges in factors of 10 (100nA - 10mA) each with 12 Bit resolution are used for controlling the output current.  
The output voltage can be limited to a maximum voltage or power value.

**voltage measurement facility:**

usable voltage range : 10 µV - 10V  
resolution : < 1 µV (typical 500nV)  
input resistace :  $> 10^{13}$  Ohms  
automatic range selection

## **2. Magnet :**

### **permanent Magnet**

wight : app. 2 Kg  
poletip diameter : 20 mm  
field @ 1cm poletip gap (air) : 0,6 T  
field polarity selection : manual  
2 temperature sample stage

## **3. Software**

1 CD with our Hall measurement software. 2 security hardlock keys

Requires a computersystem with CD-drive, printer and WIN NT or WIN 95 or WIN 98 or WIN 2000 or Win XPoperating system. **The computer system can be included on request.**

## **4. Spare part box**

including all necessary cables and spare parts.

### **Typical Performance:**

(theoretical limits of the electronic facilities)

Resistance :  $1 \times 10^{-3}$  Ohm -  $1 \times 10^8$  Ohm

with 1 micrometer layer thickness:

Resistivity :  $1 \times 10^{-5}$  Ohm\*cm -  $1 \times 10^7$  Ohm\*cm

Concentration :  $10^7$  cm $^{-3}$  -  $10^{20}$  cm $^{-3}$

**PhysTech GmbH**  
 Hall, DLTS, Customized Physical Measurement Equipment  
 Am Mühlbachbogen 55d, D-85368 Moosburg Germany  
 Tel.: +49 8761 74633 / Fax: +49 8761 74634

