



# Hall Effect Experimental Apparatus HE-3035



EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited An ISO 9001 Certified Company

www.analyticalgroup.net



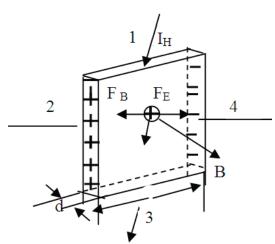
2

#### Characteristics

- High performance GaAs Hall element
- Easy to use, stable and reliable
- Affordable

Due to small size, ease of use, high accuracy, and suitability for measurement of both AC and DC magnetic fields, Hall devices have been widely used to measure magnetic fields. Together with other devices, they can be used for automatic control and measurements of position, displacement, speed, angle, and other physical quantities. This apparatus is purposed to help students understand the principle of Hall effect, measure the sensitivity of a Hall element, and learn how to use a Hall element to measure magnetic field intensity. It has the following attractions:

- 1. GaAs Hall element has high sensitivity, wide linear range, and small temperature coefficient.
- 2. Small working current of Hall element yields stable and reliable ex-perimental data.
- 3. Visible shape and structure of test sample and Hall element yield intuitive result.
- 4. Durable instrument incorporates protective mechanism.



Schematic of generating Hall voltage

#### Experimental Objectives

- 1. Acquire the relationship between Hall current and Hall voltage under a DC magnetic field.
- 2. Measure the sensitivity of a GaAs Hall element.
- 3. Measure the magnetization curve of silicon steel material using a GaAs Hall element.
- 4. Measure a magnetic field distribution along horizontal direction using a Hall element.

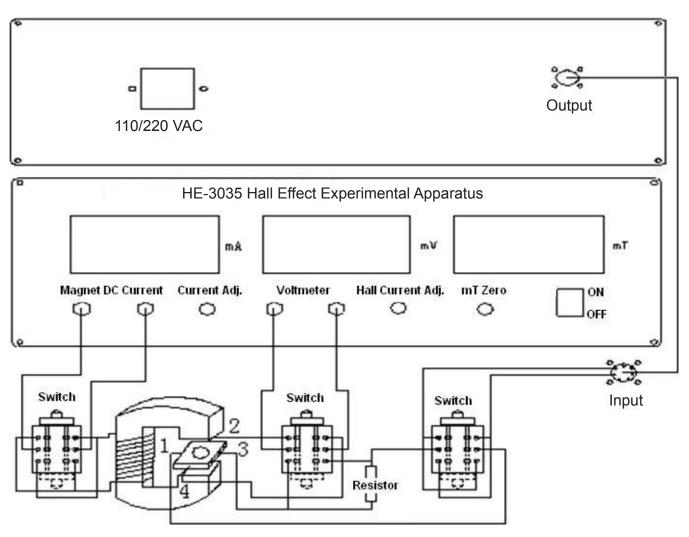


/3/

## **>>** Specifications

Current stabilized DC supply	Range 0-500 mA, resolution 1 mA
Voltmeter	4-1/2 digit, range 0-2 V, resolution 0.1 mV
Digital Teslameter	Range 0-350 mT, resolution 0.1 mT

#### Schematic of experimental configuration



#### Regulatory compliances



#### Corporate Social Responsibility

Analytical Foundation is a Nonprofit Organization (NGO) found for the purpose of:



1.Research & Innovation Scientist's awards / QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops / Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of Yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

## ▶ Reach us @





# HPLC Solutions MultipleLabs Analytical Bio-Med

Corporate & Regd. Office: Analytical House, # E67 & E68.

Ravi Park, Vasna Road, Baroda,

Gujarat 390 015. INDIA

+91 265 2252839 +91 265 2252370 F: +91 265 2254395 E: info@hplctechnologies.com info@multiplelabs.com info@analyticalgroup.net info@analyticalbiomed.com

**Analytical Distributors** 

W. www.ais-india.com www.analycalgroup.net www.hplctechnologies.com www.multiplelabs.com

**Analytical Foundation (Trust)** 

Sales & Support Offices: across the country : Distributors & Channel partners World Wide