

Basic Hall Effect Apparatus

Order code: **5401.1009934**



Cena bez DPH

744,00 Eur

Price with VAT

900,24 Eur

Parameters

Quantitative unit

ks

Basic apparatus for providing contact, power supply and support to a germanium crystal on a circuit board (U8487010, U8487020 and U8487030) in experiments on the Hall effect or on conductivity. Includes an integrated, adjustable constant current source to provide the current through the sample, a measuring amplifier with offset compensation for Hall voltages and heating to raise the crystal to as high as 170°C, also featuring temperature regulation and a switchable display showing Hall voltage, sample current, sample voltage or temperature.

Hall voltage and sample voltage can be tapped directly from the front panel. In addition three equivalent voltage outputs for Hall voltage, sample current and sample temperature can be measured from the side. Includes an attachment for assembling the apparatus on the U-shaped core (U8497215) of a transformer assembly kit and 2 connecting leads with 8-pin miniDIN plugs.

Experiment topics:

- Extrinsic conductivity
- Intrinsic conductivity
- Mobility of electrons and holes
- Drift velocity of charge carriers

- Carrier concentration
- Band separation

Specifications:

- **Outputs for equivalent voltages:** 4-mm safety sockets
- 8-pin miniDIN sockets
- **Power supply:** 12 V AC, 3 A via 4-mm sockets
- **Dimensions:** 180 × 110 × 50 mm approx.
- **Weight:** 0,5 kg approx.