



## SHBD1K

- Magnetic B-Field Sensor Head
- Isotropic
- DC-1000Hz
- >80dB dynamic range
- Sensitivity >1mT

### Features

The SHBD1K B-field sensor head is based on a set of three orthogonally arranged Hall sensors. The three voltages which correspond to the spatial components are individually available at the sensor head output. An SM-series meter (required for use of this sensor head) calculates the resulting isotropic field strength.



The characteristics of this sensor head comply with the requirements for instruments measuring human exposure to magnetic fields as required by law in both public and professional environments.

This sensor head detects magnetic fields from 0 Hz to 1000 Hz which typically occur in broadcasting, telecoms, ISM and industry. This sensor head is recommended for measuring human exposure to magnetic fields in the following environments: MRI-imaging, industrial electrolysis and electroplating, power supply plants for railway stations.

The sensor head is supplied with factory calibration. This model is also available in an M1-version which includes an accredited 17025-compliant calibration.

### Typical Applications

- MRI-Magnetic Resonance Imaging
- Industrial Electrolysis and Electroplating
- Railway: Power Supply Plants

### Specifications

**Frequency Range:** 0 Hz-1000 Hz

**Type of Frequency Response:** Flat

**Measurement Range:** 1 mT-15 T

**Dynamic Range:** >80 dB

**Sensor Type:** Hall sensors

**Directivity:** Isotropic

**Accuracy:**

**Flatness Frequency Response:**  
 $\pm 0.5$  dB (0 Hz-1 kHz)@ 5mT

**Linearity:**  $\pm 0.7$  dB (5-100 mT)

**Isotropic Response (@ 10mT):**  $\pm 0.5$  dB

**Calibration Frequencies:** 0-50-500-1000 (MHz)

**Operation Temperature:** 0°C-40°C

**Size:** 278 x 16 mm, 10.95 x 0.63 in

**Weight:** 63g, 2.23oz

**Export Classification:** EAR99

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