3DMAGNETICSENSORCALIBRATOR

Innovative device for calibrating magnetic field with high resolution.

This calibration sensor device measures all three axes of the magnetic field by performing a scan over the full unit sphere, independent of its orientation relative to the magnetic field. The calibration device rotates continuously around two orthogonal axes and the full range of polar and azimuthal angles is covered by a respective rotation. The parts of the device to be rotated are made very compact to fit in between pole pieces of a magnet.

FEATURES

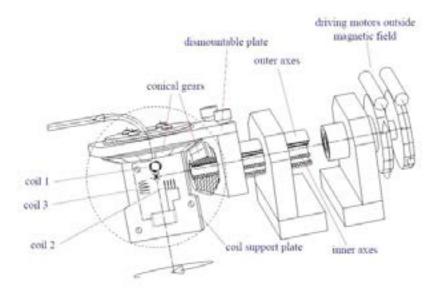
The technology allows automated and accurate calibration of many Hall sensors in a short time which is impossible to obtain with existing commercial devices.

APPLICATIONS

- Magnet field calibration in 3D using Hall sensors.
- Whenever precise magnetic field calibration is needed between 0 and 13 Tesla.

ADVANTAGES

- Up to three sensors may be calibrated in one session.
- High resolution magnetic calibration of Hall sensors in three dimensions.





technology Knowledge Transfer

AREA OF EXPERTISE

 Detectors & Instrumentation

IP STATUS

Working prototype available. Ready for licensing. The technology is protected by two patent applications: WO 2004/003585 and WO2005/064225. National Phase. Granted in Europe.

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Find out more at: kt.cern