

HALLINSIGHT® HALL MAGNETIC FIELD CAMERA

AC&DC TRUE 3-AXIS MAGNETIC FIELD MAPS



HallinSight® 32x32, 16x16 and 32x2 3-axis Hall sensor arrays.

Easy-to-use Hall magnetic field camera to map and characterize static or dynamic magnetic fields.

-  Orthogonality error $< 0.1^\circ$
-  DC or AC magnetic fields
-  Field strengths to 2 T
-  Resolution 4 μT
-  3-axis calibration
-  Dedicated software
-  Delivered with a calibration to 15 mT
-  USB interface

HallinSight® is a technology developed by **Fraunhofer Institute for Integrated Circuits** brought to you by Metrolab.

TECHNICAL CHARACTERISTICS AND ACCESSORIES

SYSTEM

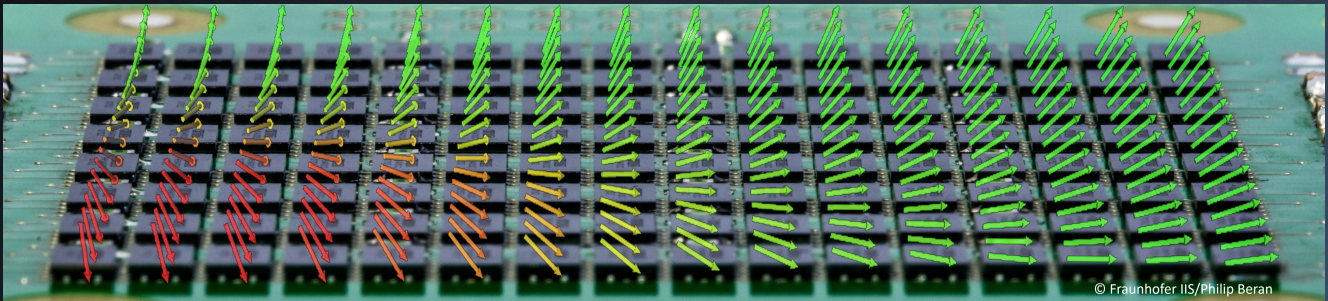
MEASUREMENT PRINCIPLE	Hall sensors
MAGNETIC FIELD RANGE	± 100 mT, ± 200 mT, ± 800 mT, ± 2 T
RESOLUTION -no avg.-	4 μ T for ± 100 mT, 96 μ T for ± 2 T
NOISE	30 μ T RMS
OPERATING TEMPERATURE	10 to 30°C, integrated temperature sensor
MEASUREMENT RATE	Up to 1000 Hz (± 100 mT, single chip)
ABSOLUTE OFFSET ERROR	< 25 μ T (Typical)
ABSOLUTE GAIN ERROR	< 0.5% (Typical)
GEOMETRIC POSITION ERROR	Lateral < 50 μ m ; Vertical < 10 μ m; Orthogonality < 0.1°
COMPUTER INTERFACE	USB with ASCII protocol
SOFTWARE	LabVIEW interface for visualization, analysis, and recording

PROBE Arrays

32x32 Hall sensors
 Measurement rate 25 Hz
 Sensor array size 80x80 mm
 Aluminum case 310x110x22.5 mm

16x16 Hall sensors
 Measurement rate 100 Hz
 Sensor array size 40x40 mm
 Aluminum case 200x60x22.5 mm

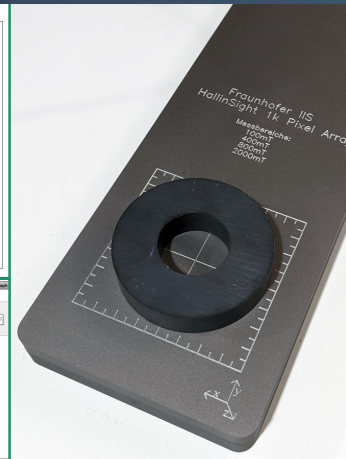
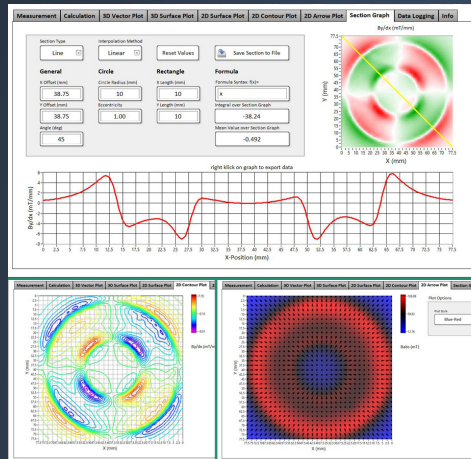
32x2 Hall sensors
 Measurement rate 250 Hz
 Sensor array size 80x2.5 mm
 PCB 106x15x2 mm



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HallinSight® SOFTWARE

OPERATING SYSTEMS	Windows 7 or Windows 10
KEY MEASUREMENT	Output for each measurement point, or subset of array: Bx, By, Bz, Babs, azimuthal angle, polar angle, temperature
OPERATING MODE	Teslameter
Analysis	Calculated Spherical coordinates and field gradient values Display: 3D vector, and surface plots 2D surface, contour, and arrow plots Section graphs



Warranty: 2 years
 Calibration interval: 18 months