Advanced Sensor Technology

Two Point Calibration

of

Analog Hall Sensor HE144 and HE244 series

1. Make sure that you have a constant current supply, recommended 1 mA for the HE144 and 2 mA for the HE244
2. First, calibrate the zero. Most accurate if you place the sensor in a zero gauss chamber, else you can place it horizontally in open air - keep metals away.
3. Next you need to know the sensitivity (gain) in a known magnetic field. This can be done with a reference magnet.
4. Once you have those two point, it is Y = A*X + B with B = offset, and A = sensitivity.
5. This simple formula already gives you a maximum error of 0.2 % up to 2.4 Tesla.
6. Important is that you do all measurements at the same temperature.

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When Performance Matters

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