

Investigation of High Order Harmonic for Signal Extraction in Matteucci Effect Based Fluxgate Magnetic Sensors

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Abstract. Fluxgate sensors are known for being cheap, robust and sensitive magnetic field sensors. Presented sensor uses Matteucci effect (ME) in its principle of magnetic field sensing, while using harmonic voltage signal extraction typical for fluxgate sensors. In order to increase the sensitivity of used sensor, investigation of high order harmonic of signal was researched.