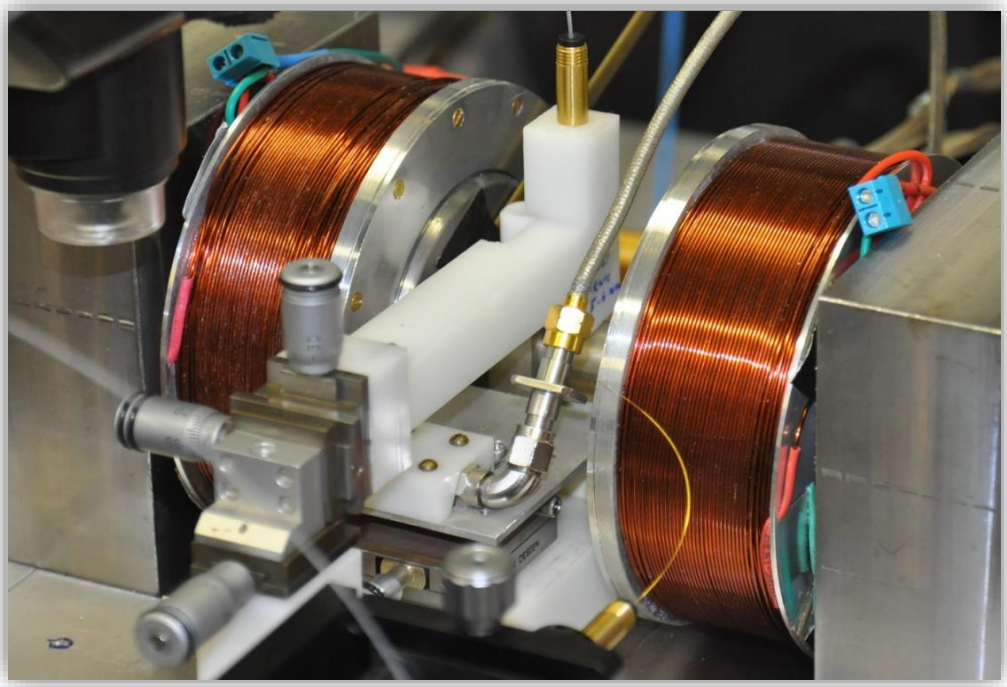
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spinMAG

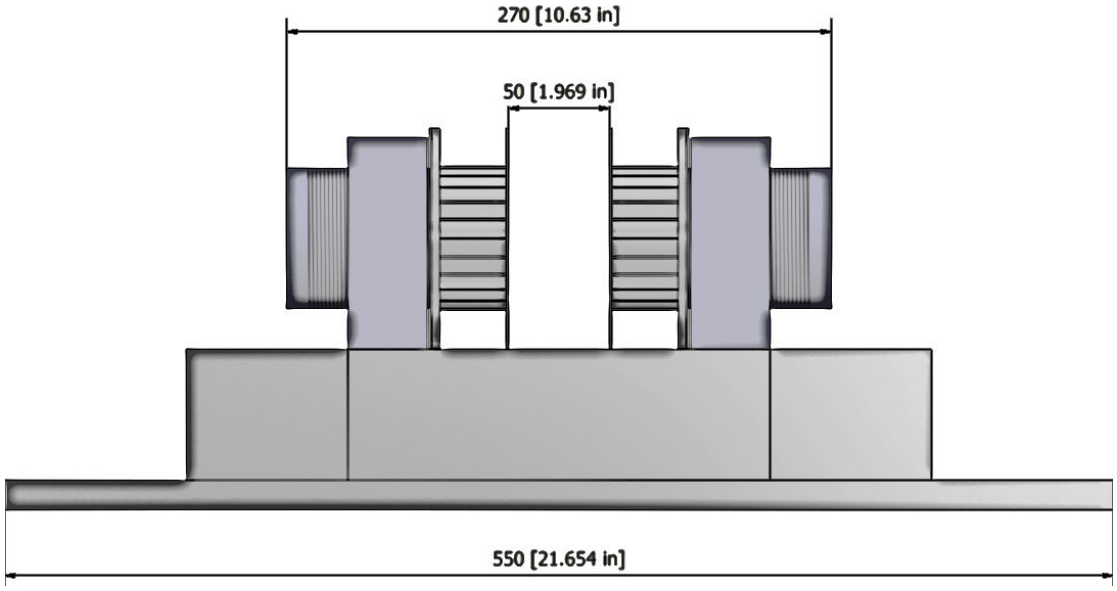
A unique compact magnet for optical tables that can be used in a variety of ESR and ODMR applications.



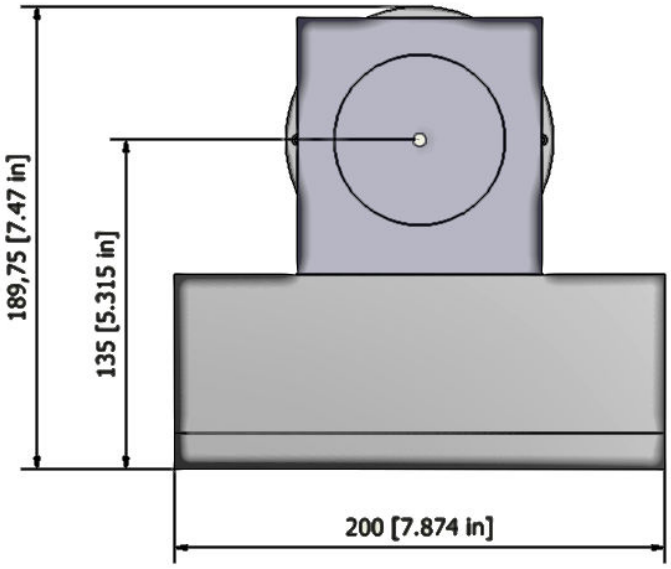
Overview

spinMAG is a combined permanent and electromagnet, based on a small standard dipole, designed and manufactured by spinflex instruments LTD. This magnet light weight and compact structure make it possible to be used on optical table. spinMAG can operate without any cooling for standard use. It can be used for multiple applications, such as research, teaching and industrial applications whether a small volume of magnetic field is required. spinMAG has an adjustable pole gap, which gives much freedom in its adaptation for various needs.

General Assembly



Front



Side

Mechanical Specification

Pole diameter	70 mm
Pole gap	0 - 50 mm
Coil spacing	0 - 55 mm
Dimensions	200×550×180
Weight	~20 kg

Magnetic-field Specification

Magnetic field	Up to 0.5 Tesla
Magnetic field sweeping range	~1 kG
Homogeneity	About 1 G for 5 mm sphere *Better homogeneity can be made for a pre-defined gap
Temperature stability	• -0.004 %/°C for the 0.25 T unit • -0.12 %/°C for the 0.45 T unit **Approximately 20 mG stability when employing closed loop electromagnet add-on on the poles with Hall field controller
Main static magnetic field	permanent magnet, not the coil

Coils Specification

Resistance	10 ohm each side
Inductance	~1 H
Max current	2A w/o cooling 3A with compressed air cooling
Coil efficiency	~400 G per A at 5cm gap

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Performance (0.5 T model)

