SCIENTIFIC MAGNETICS

product data sheet

3-D Vector Magnet

Scientific Magnetics has designed and manufactured a 3D vector magnet for physics research. The magnet consists of three sets of Helmholtz coils, nested together and mounted orthogonally. Each pair of coils is separately excited, which means that the direction of the magnetic field at the centre of the magnet can be pre-determined and set to any value.

The model illustrated is capable of generating 0.4 T in any direction, and operates at currents less than 5 A. Larger systems offering higher magnetic fields are also available.

3-D Vector Magnets can be supplied together with cryostats, variable temperature inserts (VTIs), or dilution refrigerators as required.

Features

- Low current operation
- 400 mT in any orientation
- Quench heaters for magnetization suppression
- Low loss liquid helium cryostat
- Accommodates standard VTI

Specification

Magnetic Induction (B)	400 mT
Operating Current	4.6 A
Vertical cold bore (Y-Axis)	55 mm
Horizontal cold bores (X & Z Axes)	45.5 mm
Cryostat bore	250 mm