

Quantum Design MPMS XL-5 SQUID Magnetometer

Description:

The Quantum Design MPMS XL-5 SQUID Magnetometer is a very sensitive tool to measure the magnetization of materials, as function of temperature and magnetic field.

Specifications:

Features & Info sheet:

- High sensitivity: MPMS sample magnetometers employ SQUID (Superconducting Quantum Interference Device) technology, to achieve superior measurement sensitivity and dynamic range.
- Flexible operation: the MPMS incorporates all the hardware and software needed for precise magnetic measurements in a fully integrated, modular system.
- DC Magnetization: this is the magnetic moment per unit volume (M) of a sample. If the sample doesn't have a permanent magnetic moment, a field is applied to induce one.
- AC Susceptibility: values measured include real and imaginary susceptibility, which are used to determine frequency dependence and relaxation effects.
- Automated measurements: Instruction files of up to 1500 steps can be created for immediate use, or stored on disk for later access.

Options:

1. RSO - Reciprocal sample measurement
2. AC susceptibility
3. Low field
4. Fiber optic sample holder
5. External device control + transport probe

Restrictions:

The instrument requires liquid helium for operation, thus a very tight schedule of use is practiced when the dewar is cold. Extreme care is required with sample mounting.