

Spectromag^{PT}

Magneto-optical Cryofree[®]
superconducting magnet
system



SpectromagPT Platform

Features / Benefits

SpectromagPT is a split pair, horizontal field magneto-optical **Cryofree** superconducting magnet system. It provides optical access to a sample in a variable magnetic field and low-temperature environment.

- 7 T magnetic field in a compact geometry
- Experimental inserts suit many applications
- The sample can be quickly changed via a top-loading probe while the system is cold. No need for a complicated load-lock mechanism.
- Sealed circulation loop reduces the risk of contamination and blockages, increasing the continuous running period of this system
- Excellent optical access in the horizontal plane (both parallel and perpendicular to the magnetic field)

Applications

Magneto-Optical Effects

Enables investigations of Faraday effect, magneto circular dichroism and other high field optical effects.

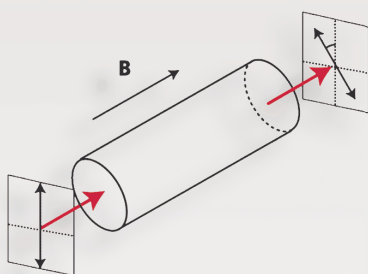
Spectroscopy

Combining high magnetic fields with optical access for Raman magneto-spectroscopy and photoluminescence.

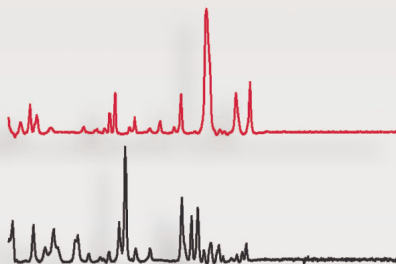
Photonics

Characterisation of quantum dots and nano-devices for photonic applications.

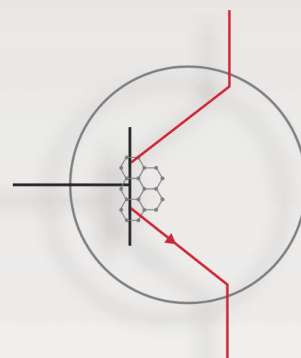
Magneto-Optical Effects



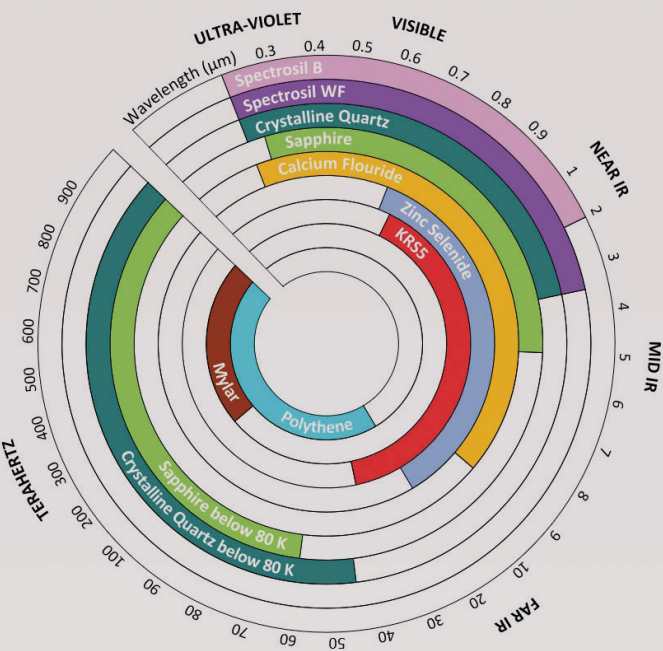
Spectroscopy



Photonics



Window Materials



Key Specifications

Temperature range	1.6 K to 300 K
Standard sample probe temperature stability	± 0.1 K
System cooldown	~ 40 hours from room temperature to 4 K
Standard sample probe cooldown	~ 90 minutes from room temperature to < 2 K (probe loaded into cold variable temperature insert)
Magnet ramp to full field	≤ 60 minutes
Variable temperature insert sample space diameter	30 mm nominal

Service Support

Our support to you

Because Oxford Instruments is unique in designing and manufacturing the complete system, we offer unrivalled support and expertise for your SpectromagPT system through our regional Customer Support teams backed by unmatched factory expertise.

Related Products



MercuryiTC

Cryogenic programmable intelligent temperature controller.

MercuryiPS

Superconducting intelligent magnet power supply.



Sample Protect

Protect sensitive samples from electrostatic discharge.

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