

SpectromagPT

A magneto-optical **Cryofree®**
superconducting magnet system



Flexible: Experimental inserts to suit many applications

Fast experiment: Quick sample change via top-loading probe

Excellent optical access: Parallel and perpendicular to magnetic field

Easy to use: Enables full sample rotation for measurements

Why choose **SpectromagPT**?

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
- The sample can be changed 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)
- Uses the highest specification magnet superconducting wire available on the market and advanced construction techniques to ensure ultimate performance and reliability

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)
Continuous system operation	Typically > 4 weeks
Magnet ramp to full field	≤ 60 minutes
Variable temperature insert sample space diameter	30 mm nominal

A typical system comprises of:

- Cryostat
- Optical Windows
- Magnet and Power Supply
- Variable Temperature Insert and Controller
- Sample Probe
- Cryocooler and Compressor
- Accessories and Manuals

Applications:

- Magneto circular dichroism
- Raman spectroscopy
- Photoluminescence
- Faraday effect measurements
- Optical characterisation of nano-devices / quantum dots



Visit nanoscience.oxinst.com/spectromagpt
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