

# C-Mag Automated Liquid Cryogen Free Research Systems

Cryomagnetics' *C-Mag* systems are versatile bench-top property measurement systems that provide the researcher with exceptional range, versatility, accuracy, and automation in materials characterization. Based on the latest cryocooler refrigeration technology, the systems are very easy to set up, operate and maintain.



**C-Mag Vari-9 System**

9 tesla Superconducting Magnet  
< 1.8K-325K Variable Temperature Insert.  
Remote Motor Option Shown

## *Never Handle Liquid Cryogenes Again!*

- **4.2K Cryocooler Based**  
No liquids for the superconducting magnet and only a small volume of LHe is recondensed for the sample. This allows sample-in-vapor operation from < 1.8K - 325K in continuous flow operation.
- **Turn-Key System**  
Superconducting magnet, 4.2K cryocooler system, superconducting magnet power supply, temperature controller, thermometry, and available Cryomagnetics' exclusive NAVIGATOR™ system control software.
- **Ease of Use**  
Sample changer allows user to change samples without warming magnet or cryocooler.
- **Dilution Refrigerator and Helium-3 Insert Options**
- **Automated or Manual Gas Handling Systems Available**  
Closed loop operation of gaseous helium only. No liquid cryogen handling.
- **Choice of 4.2K Cryocooler**  
Pulse-Tube or GM.
- **49 mm Sample Space**  
Gold-plated, rotatable sample positioner.
- **Flexible Superconducting Magnet Configurations**

Solenoids	Split Pairs	2-Axis	3-Axis
Vari-9 (9T)	Vari-7S (7T)	Vari-7/2	Vari-1/1/1
Vari-12 (12T)	Vari-8S (8T)	Vari-8/2	Vari-5/1/1
Vari-14 (14T)	Vari-10S (10T)	Vari-9/1	Vari-7/1/1



**CRYOMAGNETICS, INC.**  
INNOVATIVE TOOLS FOR SCIENTIFIC RESEARCH

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A console is provided with :

- Temperature Controller for the sample
- Temperature Monitor for the superconducting magnet
- Superconducting Magnet Power Supply

Integrated within the console is a vacuum pumping station comprised of an appropriate vacuum pump to capture the VTI's off-gas, all necessary valves and vacuum-plumbing.

Available is a touch-screen computer with Cryomagnetics' Navigator Control Software. This provides fully automated magnet control, thermometry, and gas handling.

Ultra-low vibration options are available for nanotechnology research and other vibration-sensitive applications.

*Contact us today to configure your C-Mag System.*

