

## Specifications

Last Updated: February 25, 2017

	Cryostation C2 Magneto-Optic	
<b>PERFORMANCE DATA</b>		
Temperature Range	3.4 K – 350 K	w/ radiation shield
Temperature Stability	<10 mK	peak to peak (w/ damped sample mount)
Vibrational Stability	0.65 <5 nm	RMS peak to peak
Cool Down Time to 4.2K	~3 hrs	
Cooling Power	150 mW @ 4.2K	At sample location
<b>MAGNETIC FIELD</b>		
Magnetic Field	0.45 Tesla 0.6 Tesla 0.7 Tesla 1 Tesla	20 mm pole spacing 16 mm pole spacing 12 mm pole spacing 5 mm pole spacing
Resolution	<5 $\mu$ Tesla	
Calibration	Hall Probe	Calibration sensor provided
<b>OPTICAL PROPERTIES</b>		
Optical Access	5 optical ports	one 50 mm top port, two 50 mm side ports two 6 mm bores through magnet winding
Working Distance	44.4 mm side window <4 mm top window <sup>1</sup>	1) w/ Recessed Objective
<b>INTERFACING</b>		
Electrical Access	20 user connections <sup>1</sup> 8 configurable <sup>1</sup>	1) Feedthroughs to mini-connector terminations near sample
Interface Side Panels	1	RF, DC, fiber or gas tube options available
Thermal Lagging	2 locations	To radiation shield
Temperature Sensors	2 Calibrated Cernox™	Corresponding to platform and sample temperature Location for 1 user thermometer available
<b>DIMENSIONS</b>		
Sample Space (diameter x height)	Ø 7 mm x 23 mm Ø 11 mm x 23 mm Ø 15 mm x 23 mm	12 mm pole spacing 16 mm pole spacing 20 mm pole spacing
Beam Height	100 mm	Options available to modify
<b>OPTIONS</b>		
Sample Mounting	Magneto-Optic Flange	Standard (fixed, adjustable, electrical) & custom alternatives available
Sample Motion	Optional piezo stage integration	Stages can be recessed or mounted on platform

<b>CryoFMR+ Specifications</b>	
Magnet Control	Analog voltage control
Field Strength	-7000 to +7000 Oe continuous through B=0
Field Resolution	+/- 21 $\mu$ T
RF Source	Range: 2 to 17 GHz. Accuracy +/- 0.05 GHz
Readout	Range: -10V to +10V with 16 bit resolution. Max sampling rate 5 kS/s
AC Field Modulation	Variable up to Oe peak-to-peak with modulation coils
Temperature Range	10 K – 350 K

*Note: Product specifications are based on a standard system; various options, configurations, and/or custom modifications may cause slight differences. Specifications and other information subject to change without notice.*

*†Third party add-on integration: Configuration may affect typical system performance.*