

# Cryostation<sup>®</sup> Base Platforms

## Specifications

Last Updated: February 21, 2018

	Cryostation s50	Cryostation s100	Cryostation s200	Notes
<b>PERFORMANCE DATA</b>				
Temperature Range	3.2 K - 350 K	3.2 K - 350 K	3.6 K - 350 K	
Temperature Stability	<10 mK	<10 mK	<20 mK	peak to peak (w/ damped sample mount)
Vibrational Stability	0.65 nm < 5 nm	- < 10 nm	< 2 nm < 15 nm	RMS peak to peak
Cool Down Time to 4.2K	~2 hrs	~3 hrs	~10 hrs	
Cooling Power @ 4.2K	150 mW	100 mW	75 mW	At sample location
<b>OPTICAL PROPERTIES</b>				
Optical Access	5 optical ports	5 optical ports	9 optical ports	50 & 100: 4 radial + 1 overhead, 6th optional 200: 8 radial, 1 overhead
Acceptance Angle	60° full angle 80° full angle 120° full angle	30° full angle 80° full angle 120° full angle	16° full angle 80° full angle 120° full angle	Sample at center of sample space Sample located near cold window Sample located near warm window
Working Distance	13.5 mm horizontal 7.9 mm vertical	21 mm horizontal 7.9 mm vertical	17.5 mm horizontal 7.9 mm vertical	Options for <1mm available
<b>INTERFACING</b>				
Electrical Access	20 user connections <sup>1</sup> 8 configurable <sup>1</sup>	25 user connections <sup>2</sup> 8 configurable <sup>2</sup>	25 user connections <sup>2</sup> 8 configurable <sup>2</sup>	1) Feedthroughs to mini-connector terminations near sample 2) Feedthroughs to mini-connectors pre-lagged @ 30K & 4K
Interface Side Panels	4	4	6	RF, DC, fiber or gas tube options available
Thermal Lagging	2 locations	4 locations	8 locations	To radiation shield
Temperature Sensors	2 Calibrated Cernox™	2 Calibrated Cernox™	2 Calibrated Cernox™	Corresponding to platform and sample temperature Location for 1 user thermometer available
<b>DIMENSIONS</b>				
Sample Space (diameter x height)	ø 53 mm x 63 mm	ø 95 mm x 100 mm	ø 196 mm x 75 mm	Standard & custom options available to enlarge
Beam Height	89.9 mm	126.2 mm	100 mm	Options available to modify
Breadboard Platform	N/A	Modular	190 mm 12.5 mm	25 mm radiation shield lagging band Grid of mounting holes
<b>OPTIONS</b>				
Sample Mounting	Standard thermally damped adjustable	Standard thermally damped adjustable	User specified	Standard (fixed, adjustable, electrical) & custom alternatives available
Sample Motion	Optional piezo stage integration	Optional piezo stage integration	Optional piezo stage integration	Stages can be recessed or mounted on platform

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.