

Fully Automated, Closed-Cycle Optical Cryostat



KEY FEATURES

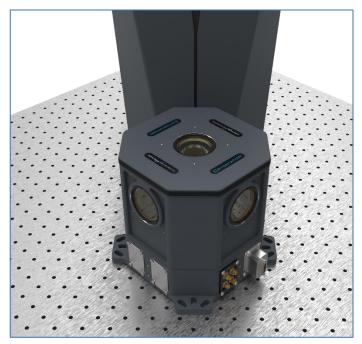
- 3.4-350K temperature range
- Configurable modular design
- Standard RF & DC I/O included
- Sample-in-vacuum, cryogen-free
- Automated temperature & vacuum control
- Touchscreen system controller
- Remote operation and monitoring

The CryoAdvance® is the latest evolution of Montana Instruments' Cryostation® best-in-class system to accelerate quantum discovery. Utilizing a purposeful modular design strategy, CryoAdvance® is a high-performance product built to serve our customers and their needs to reach and maintain low and stable temperatures quickly.

The CryoAdvance[®] is "plug-and-play," with an interface featuring easy and intuitive control technology that lends itself to right out-of-the-box set-up and cooldown. Unobstructed sample and optical access, push-button cooling, and tabletop mounting with off-table cooling technology, plumbing, and electronics add to its versatility.

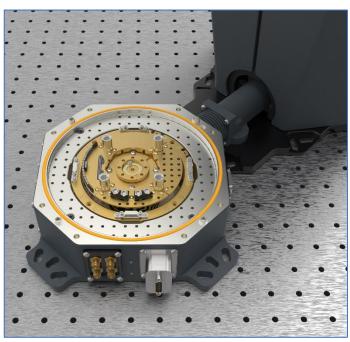
As partners in your journey, Montana Instruments will come alongside with accessible and helpful customer support to ensure that you experience the same tried and trusted results Montana Instruments customers have come to expect.





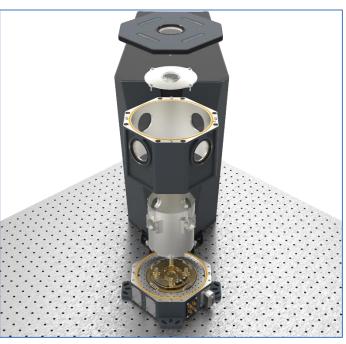
Housing & Chamber, Assembled

- Standard I/O included: 4x RF
- 25x DC channels in vacuum chamber



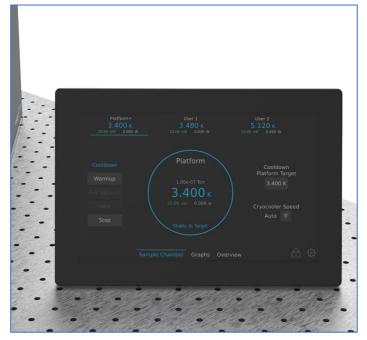
Sample Platform

 Configurable using our standard modules to support a wide variety of applications



Housing & Chamber, Detail

 Lift-off housing simplifies sample access and maximizes ease-of-use



Touchscreen User Interface

- Galaxy software suite for comprehensive & intuitive equipment control
- On-board user documentation with scripting examples



Specifications

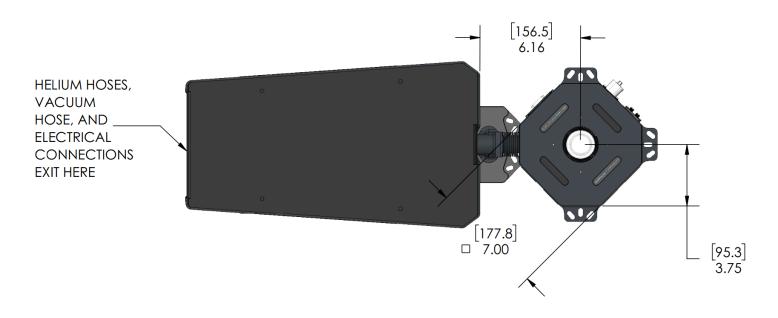
DIMENSIONS

Sample Space	Ø53mm x 116mm
PERFORMANCE	· · · · · · · · · · · · · · · · · · ·
Temperature	
w/ ATSM	3.4-350K
Temperature Stability (P-P)	arl
w/ damped manual positioner	<15 mk
Vibrations (P-P)	<15 nm
Cool Down Time to 4.2K	3 hrs
(Dependent on lab environment)	51115
Cooling Power @ 4.2K	90 mW
OPTICAL ACCESS	
Optical Windows	4 side + 1 top
Beam Height	140 mm
Acceptance Angle (Full)	27°
ELECTRICAL ACCESS	
Electrical	25 DC
Standard Side Panel Feedthroughs	1x: 4 RF
Configurable Side Panel Feedthroughs	4
CONTROL	
Temperature Control Channels	2
Remote Control and Scripting	✓
CRYOCOOLER	
Compressor	Water-cooled
Cold Head	Variable speed
Flex Lines	3.3 m
OPTIONS	
Compressor	Air-cooled
Hose Lengths	10 m & 20 m
Sample Mounts	Sample Mounts
Variable Temperature	<u>ATSM</u>
Magnetic Field	-
Optical	<u>Cryo-Optic</u> (Horizontal)
	<u>Window Substrates</u>
	<u>Low Working Distance</u>
Vacuum	Turbo
	Manual Positioner
Positioning	
Positioning Interfacing (Side Panel Feedthroughs)	The Rook Nanopositioner RF, DC, Fiber, Gas, Vacuum

CE, ISED certified



Dimensions [258.9] 10.19 [485.3] 19.11 [190.4] [140] 5.51 7.50 [24.1] .95 [656.5] 25.85 [733.3] 28.87



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