

Fully Automated, Closed-Cycle Optical Cryostat



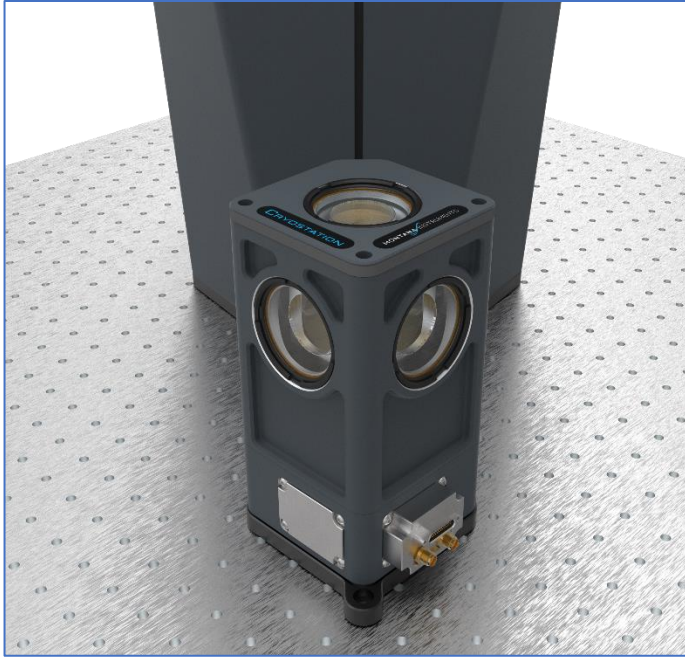
KEY FEATURES

- 3.2-350K 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.

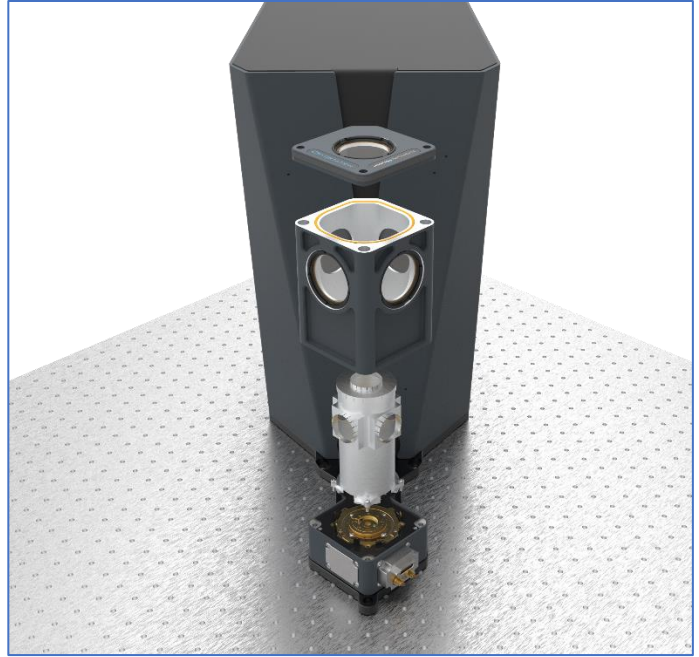
The CryoAdvance[®] is "plug-and-play," with an interface featuring easy and intuitive control technology that lends itself to right out-of-the-box set-up and cooldown. Unobstructed sample and optical access, push-button cooling, and tabletop mounting with off-table cooling technology, plumbing, and electronics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



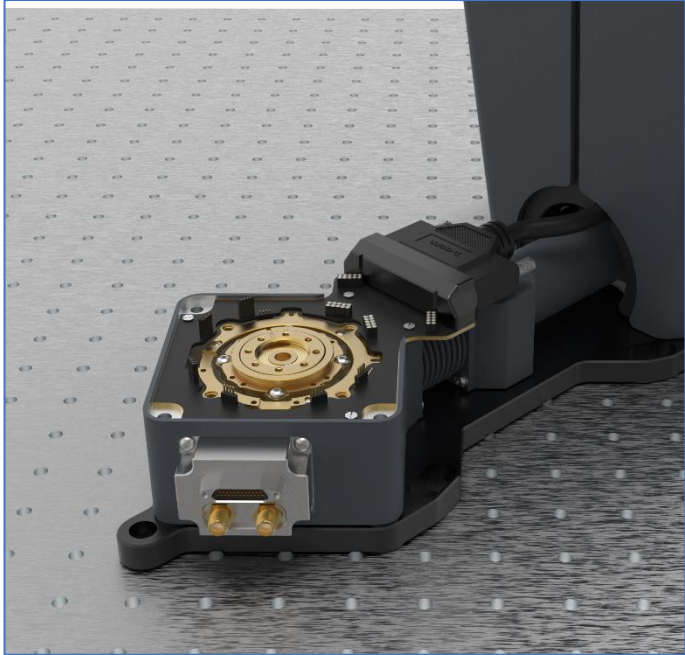
Housing & Chamber, Assembled

- Standard I/O included: 2x RF
- 20x DC channels in vacuum chamber



Housing & Chamber, Detail

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



Sample Platform

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



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	3.2-350K
Temperature Stability (P-P) w/ damped manual positioner	<10 mk
Vibrations (P-P)	<5 nm
Cool Down Time to 4.2K Approximate (dependent on lab environment)	2 hrs
Cooling Power @ 4.2K	130 mW

OPTICAL ACCESS

Optical Windows	4 side + 1 top
Beam Height	137 mm
Acceptance Angle (Full)	60°

ELECTRICAL ACCESS

Electrical	20 DC
Standard Side Panel Feedthroughs	1x: 2 RF
Configurable Side Panel Feedthroughs	1

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	ATSM
Magnetic Field	Magneto-Optic
Optical	Cryo-Optic (Vertical) Window Substrates Low Working Distance
Vacuum	Turbo
Positioning	Manual Positioner The Rook Nanopositioner
Interfacing (Side Panel Feedthroughs)	RF, DC, Fiber, Gas, Vacuum

CE, ISED certified

Dimensions

