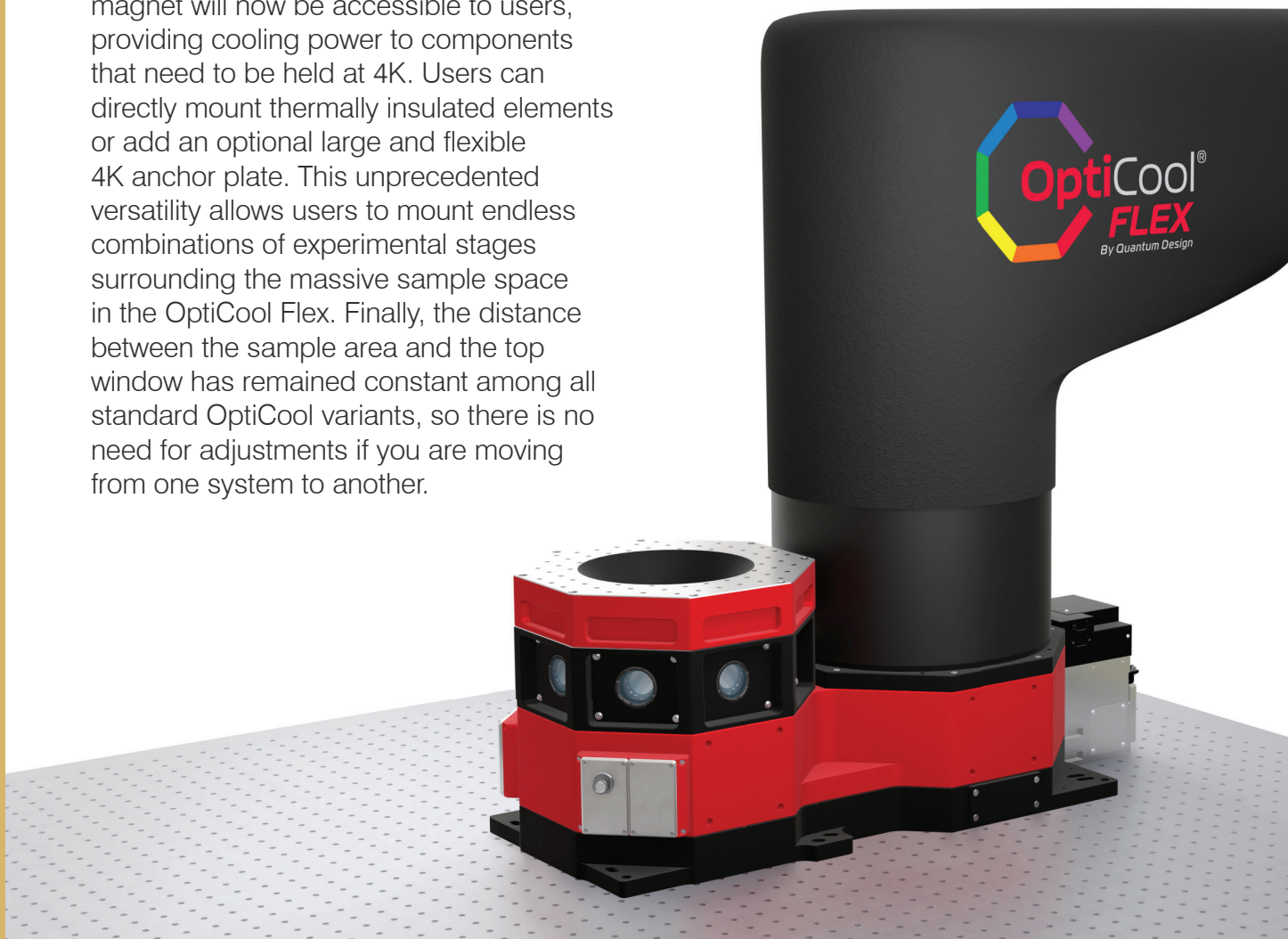
Product Announcement

OptiCool® FLEX By Quantum Design

The ***newest addition*** to the cryogen-free OptiCool® family, ***OptiCool Flex***, focuses on an expansive workspace volume to give unprecedented flexibility to your test design by removing the magnet present in other OptiCool models. The result is an experiment cavity of over 2,000 cm^3, more than 4 times the volume of other OptiCool models. It also brings all the expected features of the OptiCool platform, market leading cryogenic optical access, fully automated cooldown, seamless temperature control from 350 K to 1.7 K, ultra-low vibration, and our flexible and innovative sample pod technology.

In addition to all these items, the ***OptiCool Flex*** total thermal cycle time has decreased by over 30% and the previous 4K thermal transfer bus used to cool the magnet will now be accessible to users, providing cooling power to components that need to be held at 4K. Users can directly mount thermally insulated elements or add an optional large and flexible 4K anchor plate. This unprecedented versatility allows users to mount endless combinations of experimental stages surrounding the massive sample space in the OptiCool Flex. Finally, the distance between the sample area and the top window has remained constant among all standard OptiCool variants, so there is no need for adjustments if you are moving from one system to another.



OptiCool® FLEX	OptiCool® 7 TESLA	OptiCool® VECTOR
No Magnetic Field	7 T Split-Coil Conical Magnet	4-1-1 Vector Magnet
8 Optical Access Ports: • 7 Side Ports (NA > 0.11)		5 Optical Access Ports: • 4 Side Ports
1 Top Port (NA > 0.7) and Optional Bottom Port		
Temperature Range: 1.7 K to 350 K		
Low Vibration: <10 nm peak-to-peak		
75 mm x 200 mm Volume	84 mm x 89 mm Sample Volume	
Automated Temperature & Magnet Control		
Cryogen Free		

* Specifications subject to change without notice. (April 2026)

The OptiCool family of instruments leverage Quantum Design's 40+ years' experience in engineering and manufacturing automated temperature and magnetic field control systems. They feature a top window and multiple side window options to customize your optical access, including an option for a bottom window. The original OptiCool 7T features a 7-tesla split-conical magnet with a field perpendicular to the table and large volume of field uniformity, ±0.3% over a 3 cm diameter spherical volume. Its 7 side windows allow for unprecedented optical access to a uniform field and customizable sample pod. The OptiCool Vector provides a magnetic field up to ±4 T perpendicular to the optical table and ±1 T in the plane parallel to the optical table. Now the OptiCool Flex provides even more options to this market leading optical cryostat platform.

OptiCool® Flex Platform
(Optical vibration table not included)

Quantum Design

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