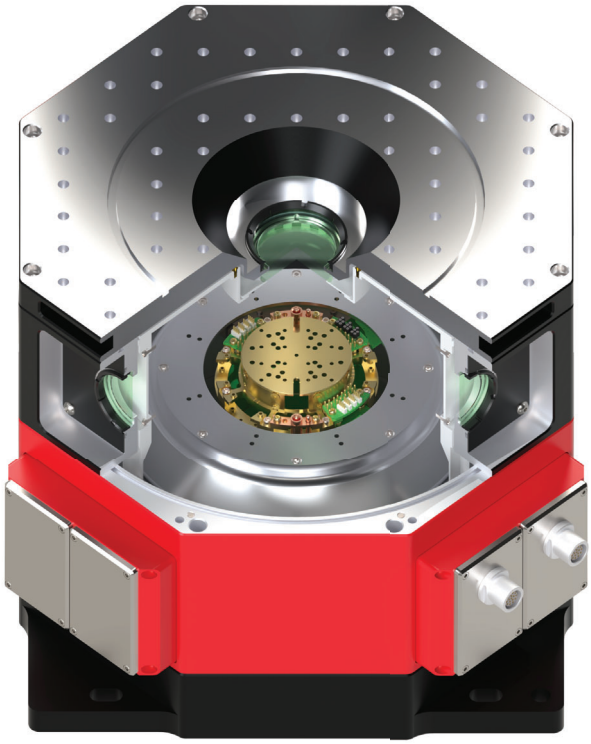
OptiCool® FLEX

Massive sample volume and experimental flexibility

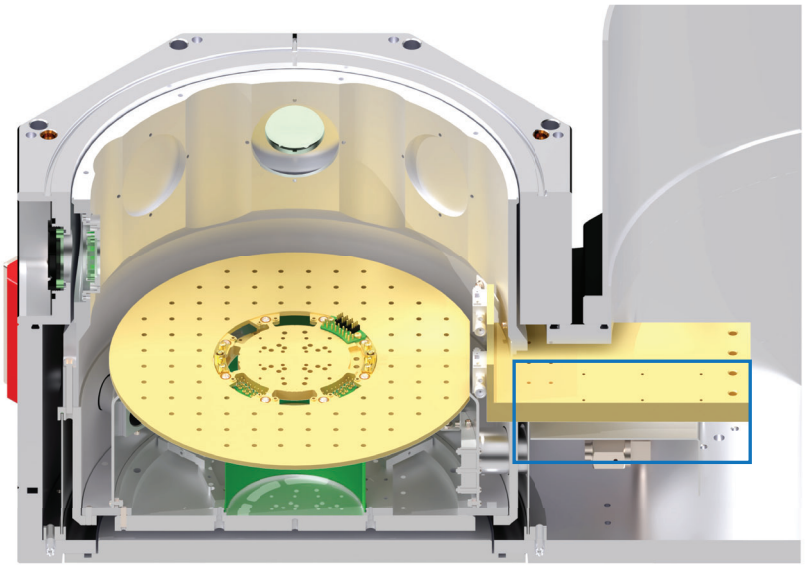
OptiCool Flex

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, including 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 4 K 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 4 K. Users can directly mount thermally insulated elements or add an optional large and flexible 4 K 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 with Standard Sample Pod (X100) and Standard Thermal Shield mounting plate, which allows for mounting at ~50 K.



OptiCool Flex with standard 4K Thermal Transfer Bus highlighted in blue with mount additional components such as RF amplifiers and the Large Area Sample Pod (X102), creating a 200 mm diameter surface usable from 1.7 K to 350 K. Final design subject to change.

Quantum Design