OptiCool® 7TESLA

High fields for cutting-edge magneto-optical experiments

OptiCool 7 Tesla

The OptiCool 7 Tesla leverages Quantum Design's 40+ years' experience in engineering and manufacturing automated temperature and magnetic field control systems. Features a superconducting, split-coil, conical magnet that has been custom designed by Quantum Design for this platform.

This large-bore magnet offers vertical fields up to ±7 tesla. The system includes a hybrid digital/analog magnet controller designed for precise, quiet control of the magnetic field. The bipolar design also allows smooth continuous ramping through zero field.

The OptiCool 7 Tesla excels in applications requiring high fields and multiple optical access ports. The highly uniform field in the center of the cryostat allows users to utilize the sample area to its fullest when installing internal optics and positioners.

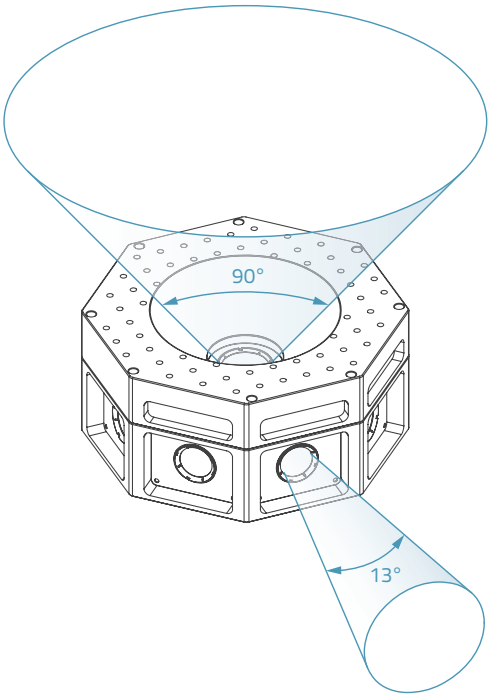
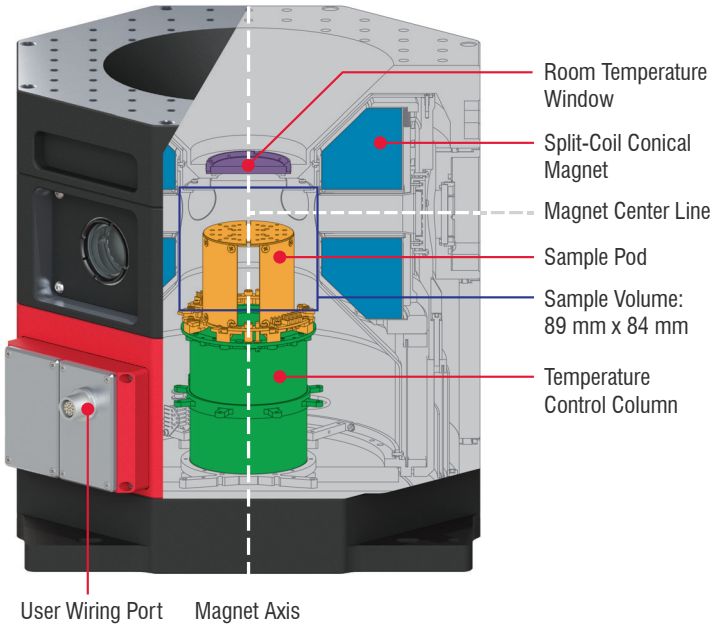


Illustration of OptiCool Cryostat demonstrating optical access angles available through 8 optical ports. Top window (NA > 0.7; 90˚ for sample located 13 mm above magnetic center) and 7 side windows (NA > 0.11; 13˚ for sample located at magnetic center). (Applies to OptiCool 7 Tesla and OptiCool Vector).



Cutaway of OptiCool Cryostat showing sample pod, sample space and magnetic axis and center. (Applies to OptiCool 7 Tesla and OptiCool Vector).



Quantum Design