Quantum Design

## **OptiCool®** Specifications\*

Temperature Control	
Temperature Range: Temperature Stability: System Cooldown Time:	1.7 K to 350 K $\pm 0.2\%$ for T $<$ 20 K; $\pm 0.02\%$ for T $>$ 20 K 17 hours (typical)
Magnetic Field Control	
Maximum Field: Field Uniformity:	$\pm$ 70,000 Oe ( $\pm$ 7 T) $\pm$ 0.3% over a 3 cm diameter spherical volume
Optical Access	
Access Port Details: 1 top and 1 optional bottom window: 7 side windows: Acceptance Angle, Top Window: Acceptance Angle, Side Window: Microscopy Options:	8 total access ports standard 50 mm diameter, 41.5 mm clear bore (user-replaceable) 40 mm diameter, 24.5 mm clear bore (user-replaceable) 70 degrees full angle: Sample located at magnet center 90 degrees full angle: Sample located 13 mm above magnet center 13 degrees full angle: Sample located at magnet axis Low working distance top window for 3mm spacing (vs 15mm standard) between ambient and sample; Vacuum objective mounting hardware for in-vacuum room-temperature or cryogenic objectives
Vibrational Stability	
Horizontal: Vertical:	< 10 nm peak-to-peak < 4 nm peak-to-peak
Sample Space	
Maximum Sample Volume: Sample Environment:	89 mm diameter by 84 mm tall Sample in cryostat vacuum space
Dimensions	
Optical Table: Floor Space:	Cryostat Footprint: 1 m x 0.5 m (minimum) Cryostat Height: 1 m (minimum) Tower Footprint: 0.75 m x 0.75 m Tower Height: 2 m (minimum) Cabinet (not shown) Footprint: 1 m x 1 m Cabinet (not shown) Height: 0.68 m (minimum)

