

attoDRY800

Technical Specifications

General Specifications	
technology	ultra low vibration, closed-cycle cryostat intimately integrated into optical table, optical table included
sample environment	cryogenic vacuum, sample cooled via braids (ATC100)
sample space	75 mm (diameter)
sample exchange	easy access via removal of vacuum shroud
usability	fully automated temperature control (vacuum, cooldown, T control, warmup), all pumps integrated, USB interface for remote control
vibration & acoustic noise damping system	proprietary low vibration design
Performance Data	
temperature range	4 .. 350 K
base pressure before cooldown	approx. 1e-5 mbar
cool down time of sample	approx. 3 h to 6 K (approx. 4-5 h to 4 K; depending on load)
temperature stability	< 15 mK (peak-to-peak with damped sample mount)
cooling power at sample location	100 mW @ 4.2 K
vibration level	< 5 nm (peak-to-peak)
Closed-Cycle Cooler	
power consumption	max. 3 kW
cooling of compressor	water cooling (default; requires local infrastructure), air cooling (optional)

Size and Dimensions	
optical table	standard size 900 mm x 1800 mm x 305 mm (leg height 597 mm); metric or imperial mounting threads (other table sizes available)
Options and Upgrades	
temperature controller	included
pumping kit	included
electrical access	36 customer wires included, heat sunk @ 4 K
optical windows	4 side windows, 1 top window
type of windows	BK7 (others on request)
vacuum shroud	customized height and diameter (on request)
feedthroughs	electrical (DC, HF), optical fibers, gas capillary (on request)
sample motion	Premium Line positioners and scanners
compressor	air
flexlines	extension to 13 m or 20 m (instead of 6 m)
air-compressor	for active vibration isolation of optical table
Compatible Equipment	
confocal microscopes	attoCFM I, attoCFM II, attoCFM III (on request)
confocal Raman microscopes	attoRAMAN (on request)
atomic/magnetic force microscopes	attoAFM I (on request), attoAFM III (on request)
combined atomic and confocal microscope	attoAFM/CFM (on request)

