attoLIQUID2000

1008161

Technical Specifications

General Specifications	
technology	liquid helium bath cryostat with VTI, vacuum isolation, vapor shielded (LN2 shielded on request)
liquid helium dewar	50 l capacity, vacuum isolation, vapor shielded (LN2 shielded on request)
sample environment	He exchange gas
sample space	2" diameter probe bore fitting all attocube inserts
sample exchange	top loading system for quick access
needle valve blockage prevention	capillary heater close to needle valve
vibration & acoustic noise damping system	dewar isolated and suspended in attoDAMP cabinet
Performance Data	
temperature range	1.8 .. 300 K
estimated liquid helium static loss rate	approx. 0.35 l/hr (standard edition, without insert)
cool down time of sample	approx. 30 min. (depending on insert and acceptable helium consumption)
cool down time of system (system incl. 9 T magnet)	approx. 6 .. 24 h
cool down time of system (system without magnet)	approx. 6 .. 24 h
temperature stability	< ±0.1 %
Size and Dimensions	
cryostat (width x depth x height)	approx. 900 x 750 x 1500 mm^3 (including attoDAMP; depending on magnet choice)
required min. ceiling height	approx. 3.50 m (depending on magnet)
optional electronics rack (width x depth x height)	640 x 640 x 1350 mm^3
Options and Upgrades	
superconducting magnet	solenoids: 7 T, 9 T, 12 T, vector magnets: e.g.: 8/2 T, 9/3 T, 9/1/1 T, ...
bipolar magnet power supply	included (with optional magnet)
temperature controller	included
pumping kit	VTI pumping kit included
helium transfer line	included
helium lever meter	included
Compatibility	
confocal microscopes	attoCFM I, attoCFM II, attoCFM III, attoCFM IV
confocal Raman microscopes	attoRAMAN
atomic force microscopes	attoAFM I , AFM upgrade options (MFM, KPFM, PFM, conductive-tip AFM), attoAFM III
scanning Hall probe microscopes	attoSHPM
combined atomic and confocal microscope	attoAFM/CFM (on request)
transport measurements	atto3DR