

# attoLIQUID1000

1007615

## Technical Specifications

<b>General Specifications</b>	
technology	liquid helium bath cryostat 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
vibration & acoustic noise damping system	dewar isolated and suspended in attoDAMP cabinet
<b>Performance Data</b>	
temperature range	4 .. 70 K (< 2K with optional pumping kit)
estimated liquid helium static loss rate	0.25 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 %
<b>Size and Dimensions</b>	
cryostat (width x depth x height)	900 x 750 x 1500 mm <sup>3</sup> (including attoDAMP; depending on magnet choice)
required min. ceiling height	approx. 3.20 m (depending on magnet)
optional electronics rack (width x depth x height)	640 x 640 x 1350 mm <sup>3</sup>
<b>Options and Upgrades</b>	
superconducting magnet	solenoids: 7, 9, 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	turbomolecular pump with suitable backing pump for sample space preparation
helium transfer line	included
helium level meter	included
<b>Compatibility</b>	
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, attoAFM/STM
scanning Hall probe microscopes	attoSHPM
combined atomic and confocal microscope	attoAFM/CFM

