# attoLIQUID1000

1007615

## Technical Specifications

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| **General Specifications** | |
| 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 |
| **Performance Data** | |
| temperature range | 4 .. 70 K(< 2K with optional pumping kit) |
| temperature stability | < ± 0.1 % |
| 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 |
| **Size and Dimensions** | |
| cryostat (width x depth x height) | 900 x 750 x 1500 $mm^3$ (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 $mm^3$ |
| **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 | turbomolecular pump with suitable backing pump for sample space preparation |
| 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, attoAFM/STM |
| scanning Hall probe microscopes | attoSHPM |
| combined atomic and confocal microscope | attoAFM/CFM |

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