

attoDRY800

1010079

Technical Specifications

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|---|---|
| General Specifications | |
| technology | low vibration, closed-cycle cryostat intimately integrated into optical table (sold separately) |
| 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 | 3.8 .. 320 K (depending on configuration) |
| Base pressure (in sample chamber) | < 5e-6 mbar |
| leak rate of vacuum | < 5e-9 mbar l/s |
| cool down time (incl. pumping time) | < 4.5 h to 5 K (depending on thermal load) |
| temperature stability | < 15 mK (peak-to-peak with damped sample mount) |
| cooling power at cold plate | > 170 mW @ 5 K |
| vibration level (cold plate, vertical) | < 5 nm (peak-to-peak@1500 Hz) |
| Compressor | |
| power consumption | max. 3 kW |
| cooling of compressor | water cooling (default; requires local infrastructure) |
| Size and Dimensions | |
| optical table | standard size 900 mm x 1800 mm x 305 mm (leg height 597 mm), other table sizes available; metric or imperial mounting threads |
| Options and Upgrades | |
| temperature controller | included |
| pumping kit | included |
| vacuum shroud | Basic (standard shroud); upgrade options: RT-SWD, RT-USWD, LT-APO objective, HV objective, Photonic Probe Station, or customized height, diameter, windows & working distance |
| electrical access | 36 customer wires included, heat sunk @ 4 K (additional wiring on request) |
| feedthroughs | electrical (DC, HF), optical fibers, gas capillary (on request) |
| sample motion | low temperature positioners |
| cryostat compressor upgrade | air-cooled (grey-room recommended) |
| flexlines | extension to 13 m or 20 m (instead of 6 m) |
| air-compressor | for active vibration isolation of table |
| Compatibility | |
| confocal Raman microscopes | cryoRaman (on request) |
| Cryogenic Photonic Probe Station | confocal microscope with 2 fiber probes for side excitation/detection |

