

# attoDRY800

Art.Nr.: 1010079

## Technical Specifications

General Specifications	
technology	ultra low vibration, closed-cycle cryostat intimately integrated into optical table, optical table i
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
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)
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
Options and Upgrades	
temperature controller	included
pumping kit	included
vacuum shroud	Basic (standard shroud), RT-SWD, RT-USWD upgrade, LT-APO objective, HV objective, Photonic Probe Sta
electrical access	36 customer wires included, heat sunk @ 4 K
feedthroughs	electrical (DC, HF), optical fibers, gas capillary (on request)
sample motion	Premium Line positioners and scannersf1
cryostat compressor upgrade	air-cooled (grey-room recommended)
flexlines	extension to 13 m or 20 m (instead of 6 m)cf0f1fs17
air-compressor	for active vibration isolation of table
Compatibility	
confocal microscopes	attoCFM I
confocal Raman microscopes	attoRAMAN (on request)
Cryogenic Photonic Probe Station	confocal microscope with 2 fiber probes for side excitation/detection

