

*Nacionālā programma
Atbalsts zinātniskās infrastruktūras modernizēšanai valsts zinātniskajās institūcijās
„Materiālzinātņu un astronomijas nozaru zinātniskās infrastruktūras
modernizēšana Latvijas Universitātē”*

Iekārtas nosaukums	Noslēgta cikla kriogēnā sistēma 0.3-300 K (Oxford Instruments)	
Fotogrāfija		
Tehniskie parametri	Closed loop cryogenic system	Model HelioxACV
	Temperature range	with zero heat load and std rad shield ≤ 300mK – 300K guaranteed 275mK – 300K expected
	Temperature stability	+/- 0.1K on 2 - 300K range +/- 2mK on 0.3 – 2K range
	Cooling time from room temperature to base temperature	10 hours typical with no sample on automated cool down process
	Regeneration time	1 hr typically

	Hold time at base temperature with zero heat load	better than 50 hr under dynamic temperature control
	Cooling power at 0.35 K	100 microwatt for more than 6 hr
	Electrical connections	24 way constantan twisted pair loom down to sample position
	Optical ports	2 optical windows
	Sample environment dimensions	Diameter 150 mm Height 100 mm
	Thermometers	Generic RuO2 sensor and Cernox on the He-3 pot Carbon sensor on sorb and other critical control elements
	Power	4.5KVA single phase, 220V, 50 Hz
	Complectation:	- Pulse Tube Cooler refrigerator with air cooled compressor and gas lines -Temperature controller system controlled via Labview driver compatible with Win 2000 and XP Vacuum pumping system complete of 70 l/s turbo pump with backing diaphragm pump excluding vacuum gauges
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