

BASE TEMPERATURE

The ultimate base temperature is dependent on the wiring options or rotator options defined.

HOLD TIME

Expressed in hours, is governed by the total heat load on the 3He pot, amount of 3He gas in the dump and the 3He gas condensed into liquid during condensation. This is enhanced with patented technology.

EXPERIMENTAL ACCESS

Dippers and Cold Probes are supplied with spare ports, as standard, to give additional access. This can be via a line-of-sight port to the 3He pot, IVC or used for additional wiring.

COOLING POWER

Cooling power is limited by the 3He evaporation rate and consequently the pumping speed of the sorb. The advanced compact design of the ICE sorption pump used across its Dipper and Cold Probe range provides extremely high pumping speeds.

DIPPER & COLD PROBE ENVIRONMENTS

- Liquid environments such as liquid helium storage dewars or modular system dewars, for dippers.
- Exchange gas environments found in VTI's can be used for Cold Probes.

REGENERATION TIME

This is time taken to re-condense and achieve base temperature.

TOP LOADING

Our 1K dippers and 3He inserts come with a 'Top Loading' option allowing insertion of samples directly into the experimental region without the need to thermal cycle the whole system.

CUSTOMISATION

ICE is happy to undertake specialist wiring and/or supply a wide range of rotators to suit your needs. Contact sales to start building your unique system to your exact requirements.

	APPLICATIONS	EXPERIMENTAL TECHNIQUES
SEMI-CONDUCTORS	Quantum hall effect Quantum computing Single electron tunneling Quantum dots	Magneto-resistance High frequency conductivity RF transport Hall effect
SUPER-CONDUCTIVITY	Flux vortices Quantum computing Josephson junctions Low T superconductors Quantum initial phenomena	
METROLOGY	Quantum hall effect Voltage standards Current standards	Magneto resistance DC/AC low frequency transport measurements Single electron tunneling
ASTROPHYSICS	Low temperature detectors Ge bolometers Super-conducting tunnel junctions	Electro-thermal measurements Low energy photon detection Voltage biased measurements
SOLID STATE PHYSICS	Giant magnetic resistance Spin glass Metal insulator transition Mesoscopic systems Heavy fermion systems	Magneto resistance Solid state NMR De Haas-van Alphen oscillations Resistivity Specific heat

ICE Integrated Systems

1K & 300mK Dippers and 300mK Cold Probes





ICE

Innovative Cryogenic Engineering

300mK Dipper Inserts & Cold Probes

The new Lemon Range from ICEoxford

DIPPER FOR STORAGE DEWARS & SYSTEM DEWARS

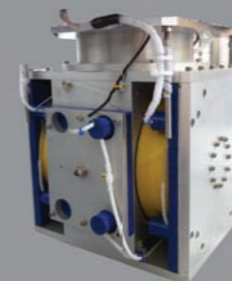
COLD PROBE FOR VTI'S & CF CRYOSTATS

STANDARD SYSTEM SPECIFICATION

- 260mK Base temperature
- 4 x channel temperature controller
- Patented condensing method
- Hold time >100 hours
- Low ³He Volume
- Line of site port

SUPERCONDUCTING MAGNET

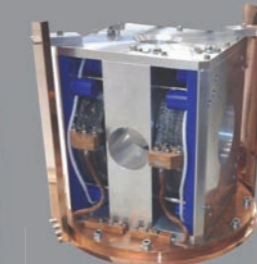
VECTOR ROTATE



SOLENOID



SPLIT PAIR



WIRING OPTIONS

SPECIAL WIRING

CO-AXIAL WIRES



- UT - 85
- Flexible miniature coax
- BNC-SMA-SMB connectors

ROTATORS

Z AXIS



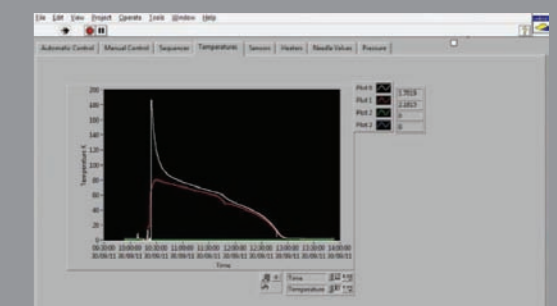
X-Y AXIS



X-Y AXIS



SOFTWARE FOR AUTOMATIC RUNNING



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