



Large controlled rate freezer

Kryo 1060

Share what leading pharmaceutical companies know with the increased yield provided by the Kryo 1060.

This top opening stainless steel freezer is ideal for precise freezing of samples in high volumes, such as volume cell line or vaccine storage.

Even and accurate temperature control, in all phases of the protocol, are possible due to the unique forced laminar flow pattern of the coolant and cryogenic insulation.

The -100 °C end temperature ensures sample integrity during transfer to storage, whilst the high capacity liquid nitrogen cylinder offers a large cooling reservoir with an extended hold time at the protocol end temperature.

Batch freezing is possible using our DeltaT software. Large sample numbers can be deposited in different machines with the subsequent freezing profile for all samples being displayed on the same graph.

- Demonstrable, repeatable viability increases for vaccines, cells and tissues
- Exact temperature control for up to 8000 ampoules
- Compliant – robust access control, ‘per run’ reporting and real time alarms
- Optimised for different cell types – user definable freezing profiles

Want to optimise freezing profiles? enquiries@Planer.com



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TECHNICAL SPECIFICATIONS		
Kryo 1060 180:		
Dimensions	External	Internal
Height	112 cm	64 cm
Width	86cm	1x50cm
Depth	116cm	50cm
Weight	211 kg (shipping weight inc. Packaging) approx.	
Capacity	4000 x 2 ml vials	
Kryo 1060 380:		
Dimensions	External	Internal
Height	112 cm	64 cm
Width	132 cm	100 cm
Depth	116cm	50cm
Weight	423 kg (shipping weight inc. Packaging) approx.	
Capacity	8000 x 2 ml ampoules	
Circulation	Horizontal laminar flow	
Temperature range	+40 °C to -100 °C. Warning! The freezer is fitted with a manually-resettable thermal cut-out to prevent over heating. This will operate if the chamber is programmed to run above +40 °C and will require a Service Engineer to reset it.	

Capacity data for straws, vials and blood bags available on request.

Cooling medium	Liquid Nitrogen 22 -30 psi
Heater	1700 W
Accuracy	±0.5 °C at a hold at 0 °C (dynamic accuracy depends on actual programme, e.g. Rate of change of temperature)
Heating rates	0.01 °C/min to 1 °C/min
Cooling rates	-0.01 °C/min to -5 °C/min
Power Requirements	230V~ 50/60Hz, 16A (max.) The freezer may be damaged by voltage surges in excess of 15% above nominal.
Standards	Complies with 89/336/EEC EMC Directive as amended by 93/68/EEC and 73/23/EEC Low Voltage Equipment Directive as amended by 93/68/EEC
Storage temperature	-10 °C to +60 °C
Storage humidity	Up to 95 % non-condensing
Operating temperature	+5 °C to 40 °C
Operating humidity	Less than 90 % non-condensing
RECOMMENDATION OF ADDITIONAL EQUIPMENT:	
22 psi System	System Cylinder - MVEUROCYL230SB Phase Separator - MVPHASE
22 psi System (alternative)	Vacuum Jacketed Pipe Work System Phase Separator - MVPHASE