Cryo Products

Do you have a question?

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Planer Kryo 560 – 16

Fully featured Tissue Bank freezer for cryopreservation of Bone Marrow, Stem Cells, Skin, Cord Blood and other critical high volume samples

The Kryo 560 - 16 incorporates all of the critical features expected from a high class biological freezer. The system is specifically designed with full system safety protection. The -180˚C end temperature ensures sample integrity during transfer to storage whilst the flexibility of the system, including protocol stage transition based on sample or chamber temperature or time, is ideal for the more demanding protocols associated with the most advanced cryopreservation techniques.

The high capacity LNP4 active nitrogen pump offers both faster cooling rates and, when combined with a LAB 30 dewar, a large reservoir offering the reassurance of an extended hold time at the protocol end temperature.
The system sample capacity is sufficient for the busiest laboratory and the state of the art compact design will enhance the most modern facility. The top opening chamber, combined with a unique forced laminar flow pattern of the coolant and cryogenic insulation, ensures even and accurate temperature control in all phases of the protocol and prevents the lid from freezing shut at cryogenic temperatures.

The MRV controller system has been created to offer multiple protocols whilst remaining simple to programme and operate. Both during and after a run it offers the widest range of displayed information, alphanumerically and graphically via the easy view display and as a print out on the integral full view printer.

Validation is a high priority and the MRV offers password controlled access on multiple user levels, time and date stamping, programme review/verification before running and data storage for the last 5 runs for subsequent printing.

User calibration with associated hard copy is featured and PC connection compatible with our comprehensive Delta T™ software application is standard. These help protect against power failure and PC failure when running with software. Processor or system problems are controlled and the system restarts to protect samples. For example all control and data systems are separated, the controller can be removed from the operating freezer with no loss of programme integrity; data storage and processing are run on completely isolated electronic systems.

PRODUCT SPECIFICATIONS

Chamber volume	16 litres
Capacity	11 x 250/500ml bags, horizontally or vertically in chamber
Ampoule capacity	726 x 2ml in baskets
Straw capacity	608 x 2ml on canes (horizontal)
Lower temperature limit	-180°C
Cooling rates	-0.01 to -50°C
Controlled heating rates	0.01 to 10°C/Min
System controller	MRV

- Designed for freezing of samples in bags, ampoules and straws
- Controller displays demand, sample and chamber temperatures, programme stage and current temperature graphic
- Menu driven controller, simple to programme and operate
- Protocol stage trigger on sample or chamber temperature or time
- Unique forced laminar flow system ensures efficient, even cooling

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STANDARD OPERATION FEATURES
1 Start above ambient
2 Controlled heating
3 Data Printing (integral printer)
4 Comms port for PC connection
5 Fast cooling rates
6 Multiple safety features

TEMPERATURE / HUMIDITY SPECIFICATIONS	
Range	+30°C to -180°C
Heating Rates	0.01°C/min to 10°C/min
Cooling Rates	-0.01°C/min to -50°C/min
Controller accuracy	±(0.3 + 0.005 x TM)°C where TM is the magnitude of the temperature
Storage temperature	-10°C to +50°C
Storage humidity	5% to 95% relative humidity non-condensing
Operating temperature	5°C to 40°C
Operating humidity	5% to 90% relative humidity non-condensing
CONTROLLER SPECIFICATIONS	
Dimensions	80mm high x 220mm wide x 350mm deep
Weight	2.6 kg approx.
Display	240 x 64 LCD with CCFL backlight
Printer	320/640 dot thermal printer)
Keypad	20 key membrane keypad
Programmable Cooling Rate Range	-0.01°C/min to -99.9°C/min
Number of profiles	10
Steps per profile	32
Number of stored runs	10
CHAMBER SPECIFICATIONS	
Weight	23 kg
Capacity (Litres)	16 litres
Chamber dimensions (mm)	350mm high x 230mm wide x 230mm deep
0.25ml straws	608 horizontal or 250 vertical
0.5ml straws	68
2ml ampoules (or vials)	726
50cc blood bags	22
250cc blood bags	11
500cc blood bags	11
Power requirements (inc. MRV Controller)	115V ~ 50/60Hz 1500VA
	230V ~ 50/60Hz 1500VA