Planer Kryo 750 Controlled Rate Freezer

Sophisticated temperature control and simple operation – the Kryo 750 is perfect for ensuring viable preservation of high volume valuable biological cells and tissues.

Rating: Not Rated Yet
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ManufacturerPlaner

Description

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Description

The Kryo 750 is an integrated controlled rate freezer for cryopreservation of larger volume samples or samples in larger numbers.

The controlled rate freezer is designed for freezing of samples in bags, vials and straws.

It has a simple 2 button operation with standard PC software to enable password protected multiple protocols. A forced laminar flow cooling system ensures most efficient, even cooling and the machine has Top or Front opening for easy loading. Heated door seals prevent the lid freezing shut at cryogenic temperatures.

Protocol stage “trigger on sample”, or chamber temperature, or time and the inner chamber is removable for sterilisation. The 750 has a Comms port - for PC connection and has flexible and fast cooling rates.

This controlled rate freezer is designed for freezing of bigger volumes of samples in bags,vials and straws. It has a simple 2 button operation to prevent the user accidently running the wrong protocols. By using our PC software, DeltaT, enables password protected multiple protocols, online data-viewing, capture and storing for validation.

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

A forced laminar flow cooling system ensures efficient, even cooling. The machine has top or front opening for easy loading.

The heated door seals prevent the lid from freezing shut at cryogenic temperatures. Protocol stage“trigger on sample”, or chamber temperature, or time.

The inner chamber is removable for sterilisation. The 750 has a Commsport for PC connection and hasflexible and fast cooling rates.

Benefits:

- Top or Front opening for easy loading
- Freeze samples in bags, vials and straws
- Forced laminar flow for efficient and even cooling
- Trigger on sample, time or temperature
- Unique 2 button operation
- Standard PC software enables password protected multiple protocols
- Heated door seal prevents freezing shut at cryogenic temperatures
- Inner chamber removable for sterilisation

Features

Features:

- Chamber volume: 29 litres
- Capacity: 20 x 250/500/750/1000 ml blood bags, horizontally/vertically in chamber, or 40 x 50 ml blood bags, horizontally/vertically in chamber
- 96 x 25ml PALL bags
- Vial or ampoule capacity: 1452 x 2 ml
- Straw capacity: 1216 x 2 ml
- Lower temperature limit: -160 ºC
- Cooling rates: -0.1 to -10 ºC/min
- Controlled heating rates: 0.1 to 10 ºC/min
- System controller: integral
- PC Software: includes Planer's DeltaT

Protocols can be based on ‘sample temperature event’ triggering, which combined with the fast cooling rates and forced laminar flow of the system, ensures high efficiency cooling at the fusion temperature. This enables efficient latent heat removal, creating optimum sample viability post thaw. The easy access front opening door is closed via a 3 point closure system, ensuring a leak free seal which helps to prevent the door freezing closed at low temperatures; additional protection is provided by heated door seals. The freezer’s control system is operated via a two button process which helps prevent accidental running of a wrong protocol. This also helps with rapid user training and process verification. The system can also be operated via Planer’s software application - DeltaT which then offers multiple protocols and data viewing on-line, as well as data capture and storage for validation.

Specifications

Technical Specifications		
Dimensions – Front Loading	**External**	**Internal**
Height	55cm	26cm
Width	79 cm	46.5 cm
Depth	48cm	25cm
Dimensions – Top Loading	External	Internal
Height	48cm	26cm
Width	79 cm	44.5 cm
Depth	55cm	26cm
Weight	45 kg (shipping weight includes Packaging)	
2 ml Vials	1452 on canes or 784 in baskets	
Straws	5808 x 0.25ml (on canes), 2420 x 0.5ml (on canes) or 836 x 0.25ml-0.5ml (on racks)	
PALL bloodbags	96	
250-1000ml Bloodbags	20	
Circulation	Horizontal laminar flow	
Temperature Range	+100.0°C to -160°C	
Cooling Medium	Liquid Nitrogen 22 ±2 psi	
Heater	1000W	
Sensors: Control and Sample	4-wire Platinum resistance thermometer. Sensors are linearised in software to international standards that utilise a 4096-point lookup table based on BS1904:1984. Table 1. Calibration facility provided.	

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 10°C/min
Cooling Rates	-0.01°C/min to -10°C/min
Programmable Cooling Rate Range	-0.01°C/min to -99.9°C/min
Operating Positions	Vertical or horizontal
Thermal Cutout	120°C cutout
Power Requirements	103 - 126VAC 50/60Hz 1200VA (max.) (470VA freezing only, with seal and bearing heaters operating). The freezer may be damaged by voltage surges in excess of 15% above nominal.
Chart Sensitivity	16.7 mV/°C. Nominal impedance > 10K
Recorder Scaling	0V = -200°C, +5V = +100°C
Standards	Designed to comply with BSEN 61010, CSA22.2No.125-M1984, CSA22.2No.151- M1986, EN50082-2, EN50081-2
Storage Temperature	-10°C to +70°C
Storage Humidity	Up to 95% non-condensing
Operating Temperature	5°C to 40°C
Operating Humidity	Less than 90% non-condensing
Additional Equipment Recommendations	
22 psi System	System Cylinder - MVEURO - CYL230SB Phase Separator - MVPHASE
22 psi System (alternative)	Vacuum Jacketed Pipe Work System Phase Separator - MVPHASE

Reviews

There are yet no reviews for this product.