



Portable freezer

Kryo One

Ideal for stem cell research and clinical trials, the portable Kryo One allows you to safely transport biological products between different site locations.

This ultra low temperature portable freezer has a wide temperature range, helping you store your samples from -86 °C to -20 °C.

With the smallest footprint in its class, the Kryo One gives you more placement options within your site. Its volume is 25 litres and it has an empty weight of 21 kg.

The freezer can be plugged in to a mobile power supply, which allows the samples to be transported between sites, no matter the length of the transit time.

The Kryo One has low energy consumption, low shipping costs and is easily manoeuvrable so you can transport your samples safely between different sites.

- Lowest Energy Consumption, <2.8 kWh/day @ -80 °C
- Lowest Shipping Costs
- Easily Manoeuvrable
- Smallest Footprint in its Class
- Plugs into Any Outlet
- 12 V DC Power Supply
- Wide Temperature Range, -86 °C to -20 °C

Want to transport your valuable samples to different sites?
enquiries@Planer.com



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APPLICATION, RATING AND ELECTRIC DATA	
Application	Storage of general (non-flammable) laboratory materials
Storage Volume	25 litres (0.9 cu.ft)
Storage Capacity	18 standard 2" boxes
Temperature Range	-86 °C to -20 °C @32 °C (90 °F) ambient, uniformity ±0.75 °C top to bottom, adjustable in 1 °C increments Presets for -86 °C (default), -40 °C and -20 °C
Electric Power	120 V or 240 V, AC; 60 Hz or 5 Hz; or 12 V DC from mobile source
Maximum Power (current)	280 watts (3.6 amps @120 V, 1.8 amps @240 V)
Auto-Voltage Capability	100 V to 240 V, 50 or 60 Hz
Electric Supply Rating	15 amp or greater grounded circuit
Power Plugs Available Separately	NEMA 5-15P plug requires standard NEMA 5-15R receptacle (120 V); Length: 3525 mm (139 in.) or NEMA 6-15P plug requires standard NEMA 6-15R receptacle (240 V); Length: 4265 mm (168 in.)
Certification/Agency Listing	CE
Noise	Typical of laboratory equipment
Indoor/Outdoor Use	Indoor use only
Application Environment	Non-Corrosive, non-flammable, non-explosive
Ambient Operating Temperature	+5 °C to +35 °C (41 °F to 95 °F)
CONTROLLER	
Controller Type	Microprocessor controls
Security	Lockable lid
Warm and Cold Alarms	Setpoint ± 10 °C
Control Sensor	One RTD (PT100 Class B)
Dry Contacts	Optional

REFRIGERATION SYSTEM	
Cooling Engine	Humm™ helium charged free-piston Stirling engine with continuous modulation
Heat Transport System	Gravity driven thermosiphon
Refrigerant	R-170 (Ethane) 10 - 12 grams
Evaporator	Cold wall (inner liner)
Heat Rejection	Finned heat exchanger with forced air cooling Air inlet: Right front side of unit Air outlet: Below control panel on front of mechanical compartment
Defrost Method	Manual
PERFORMANCE DATA, EMPTY CABINET	
Steady State Energy Use	< 2.8 kWh/day at -80 °C Setpoint
Heat Dissipation	403 BTU/h (load to HVAC) at -80 °C Setpoint
Pull-Down from 25 °C Ambient	3 hours
Recovery from 1 minute lid opening	20 minutes to -80 °C
Warm-Up Profile, -80 °C	30 minutes to -60 °C 70 minutes to -40 °C 130 minutes to -20 °C
DIMENSIONS AND CONSTRUCTION	
Interior (L x W x D)	332 x 221 x 340 mm (13.1 x 8.7 x 13.4 in.)
Exterior (L x W x D)	692.5 x 350 x 460 mm (27.3 x 13.8 x 18.1 in.)
Net Weight, Empty	21 kg (46 lbs.), nominal
Shipping Dimensions (L x W x D)	787.4 x 482.6 x 584.2 mm (31 x 19 x 23 in.)
Shipping Weight	26.3 kg (58 lbs.), nominal
Insulation	High performance vacuum insulated panels and polyurethane foam using environmentally friendly CO ₂ blowing agent
Gasket Header	User programmable duty cycle
Options	Plastic Utility Bin, AC Power Cords, Mobile Power DC Cord, Sub-Lid, Certificate of Calibration, Temperature Mapping Validation, Remote Alarm Contacts

Specifications may change without notice, third party trademarks acknowledged. Ai025/V1

Planer plc

110 Windmill Road, Sunbury-On-Thames
Middlesex TW16 7HD, United Kingdom

Tel: +44 (0)1932 755 000
Fax: +44 (0)1932 755 001

enquiries@planer.com
www.planer.com