# reliable long-term storage solution

### Thermo Scientific CryoPlus Sample Storage Systems

Thermo Scientific CryoPlus series provides the perfect combination of liquid nitrogen storage reliability and microprocessor technology. Storage capacities of up to 38,500 2.0 mL vials (8,450 to 65,910 Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> Cryobank<sup>™</sup> vials) make the most of your laboratory storage space.



#### **Storage System Features**

- Top-mounted control panel allows easy access to the CryoPlus' microprocessor controller for programming
- All lids incorporate foamed-in-place, high density urethane insulation with dedicated vent (U.S. Patent 5,779,089). Two independent, flexible gaskets reduce the migration of moisture into the chamber and reduce icing.
- 24 tricolor LEDs continuously display actual liquid nitrogen level and high-level/low-level setpoints
- Remote alarm contacts for in-house remote alarms or connection to a Sensaphone<sup>®</sup> Telephone Dialing System
- Counterbalanced UL 61010 third addition compliant lid with 100% clearance allows each entry into the storage area for retrieval of samples, while minimizing sample exposure time and maintaining a safe work environment.
- Heavy-duty casters are provided standard
- Incorporates a temperature sleeve as a standard feature, which provides colder temperatures at the top and more efficient operation in vapor phase
- · Storage tanks are vacuum insulated with stainless steel interior
- Exterior cabinet is constructed of 18-gauge, cold roll steel with powder-coat paint for durability and a high quality uniform finish. Salt spray tests exceed 1,000 hours per ASTM Standard 117B-85
- All models come standard with LN<sub>2</sub> transfer hose

## For maximum product security, CryoPlus incorporates three different solutions

- · A convenient front-mounted cabinet key lock for sample security
- A keyed lock on the microprocessor for temperature and alarm set-point security
- A rear-mounted recessed power switch to prevent accidental power shut off

## A complete sample storage solution offering for vapor or liquid phase

- · Square and vertical racks for vial storage
- Frames and canisters for bag storage
- Specialty racks for cane storage
- Gas by-pass assembly delivers warm nitrogen to atmosphere until the control probe reaches set temperature. The by-pass valve closes and the fill valve is energized, preventing the storage area from being subjected to warm nitrogen gas. This is also required if the CryoPlus is connected to a manifold system to prevent LN<sub>2</sub> source alarms.

### **CryoPlus Information Panel**



#### > Thermo Scientific CryoPlus Sample Storage Systems

Model	Model No.	LN <sub>2</sub> Capacity (liters)	Vial Capacity 1.2-2.0 mL (CryoBank)	Electrical	Plug Type	Inner Tank Diameter in. (cm)	Exterior Dimensions H x W x D in. (cm)	Shipping Weight	Regulatory Listings	LN <sub>2</sub> and Utility Connection
CryoPlus 1	7400	90 6,318 <sup>1</sup>		115v/60 Hz	NEMA 5-15P	16	41 x 21.5 x 26	260 lbs/		All models
	7401	90	(8,450 <sup>2,3</sup> )	208-230v/50 Hz	CEE 7/7	(40.6)	(104.1 x 54.6 x 66)	117.9kg	CFDA, cULus and CE	require 22 psi low pressure supply tank and are supplied with (1) 0.5 in. 45° flare stainless steel flexible transfer
CryoPlus 2	7402	200 1	13,500 <sup>2</sup> (22,815 <sup>2,3</sup> )	115v/60 Hz	NEMA 5-15P	24 (61)	41 x 28.5 x 34 (104.1 x 72.4 x 86.4)	480 lbs/ 217.7 kg		
	7403	200		208-230v/50 Hz	CEE 7/7					
CryoPlus 3	7404	340	23,000 <sup>2</sup>	115v/60 Hz	NEMA 5-15P	31 (78.7)	41 x 34.5 x 41.5 (104.1 x 87.6 x 105.4)	550 lbs/		
	7405	340	(38,870 <sup>2,3</sup> )	208-230v/50 Hz	CEE 7/7			249 kg		
CryoPlus 4	7406	EE0	39,000 <sup>2</sup>	115v/60 Hz	NEMA 5-15P	39.5	47 x 43.5 x 50	1070 lbs/		
	7407	552 (65,910 <sup>2,3</sup> )		208-230v/50 Hz	CEE 7/7 (110.3)	(110.3)	(119.4 x 110.5 x 127)	484.3 kg		hose

<sup>1</sup> Using arrowhead racks no. 4000044.

 $^{\rm 2}$  Using vertical racks no. 4000012 and dense storage tube boxes.

<sup>3</sup> Using Nunc Dense storage boxes (196-cell) and 1 mL Cryobank tubes.

### > Thermo Scientific CryoPlus Vapor Phase Starter Kits

Model	Model No.	LN <sub>2</sub> Capacity (liters)	Electrical	Description
CryoPlus 1 Vapor Phase	7400RAKHGBR	90	120V 50/60Hz	Package includes CryoPlus 1 (model 7400) and a hot gas bypass option, 4 storage rack and a 3.5" riser, UL
Starter Kit	7401 RAKHGBR		230V 50/60Hz	Package includes CryoPlus 1 (model 7401) and a hot gas bypass option, 4 storage rack and a 3.5" riser, CE $$
CryoPlus 2 Vapor Phase	7402RAKHGBR	200	120V 50/60Hz	Package includes CryoPlus 2 (model 7402) and a hot gas bypass option, 10 storage rack and a 3.5" riser, UL $$
Starter Kit	7403RAKHGBR	200	230V 50/60Hz	Package includes CryoPlus 2 (model 7403) and a hot gas bypass option, 10 storage rack and a 3.5" riser, CE $$
CryoPlus 3 Vapor Phase	7404RAKHGBR	340	120V 50/60Hz	Package includes CryoPlus 3 (model 7404) and a hot gas bypass option, 17 storage rack and a 3.5" riser, UL $$
Starter Kit	7405RAKHGBR	340	230V 50/60Hz	Package includes CryoPlus 3 (model 7405) and a hot gas bypass option, 17 storage rack and a 3.5" riser, CE $$
CryoPlus 4 Vapor Phase	7406RAKHGBR	552	120V 50/60Hz	Package includes CryoPlus 4 (model 7406) and a hot gas bypass option, 29 storage rack and a 3.5" riser, UL $$
Starter Kit	7407RAKHGBR	002	230V 50/60Hz	Package includes CryoPlus 4 (model 7407) and a hot gas bypass option, 29 storage rack and a 3.5" riser, CE $$