

Whether you're seeking small-capacity units for research, or high-end, programmable systems for pilot applications, Thermo Electron offers a complete line of high performance freeze dryers to meet your needs. The extensive family of Heto PowerDry freeze dryers are known for providing quality and innovation. Combined with Thermo Electron's global service and support network, the Heto PowerDry family of freeze dryers is designed to ensure years of reliable performance.



### Product Features

- Exclusive PowerDry technology maintains temperature throughout the run for faster, more efficient drying
- Advanced refrigeration system features a dual-capillary design for maximum cooling performance, providing the fastest possible drying time as well as evenly and fully distributed ice condensation
- Condenser surface area is optimised on each unit to provide extraordinarily high throughput
- Optional HSC500 PLUS shelf controller can be connected for additional heat and control
- Wide range of accessories available for bulk drying in flasks or trays; ampule drying on manifolds; and vial drying in chambers with stoppers
- All Heto PowerDry accessories are fully interchangeable with our full range of Heto PowerDry freeze dryers
- Optional mobile trolley can easily accommodate a Heto PowerDry freeze dryer and accessories

## Heto PowerDry LL1500

The Heto PowerDry LL1500 freeze dryer delivers 1.5 kg per 24 hours of ice trapping capacity – the highest capacity available for a condenser of its size. The unit employs PowerDry technology for fast, reliable and efficient drying using a condenser temperature as low as -110°C.

### Product Features

- Ultra low temperature – down to -110°C, preserves sample activity and structural integrity and allows you to use lower-temperature solvents such as methanol, di-ethyl ether, ethanol and others
- High throughput – superior cooling capacity enables the Heto PowerDry LL1500 to reach the set temperature quickly, so you can process more samples in less time
- Offers the greatest total ice trapping capacity for its size – 3 kg
- Versatile – makes an excellent cold trap when used in conjunction with vacuum concentrators
- Serves as a secondary cold trap in conjunction with other freeze dryers



### Specification Table

#### Heto PowerDry LL1500

Condenser	≤ -110°C
Ice Removal Capacity 24 hours	1.5kg (3.3 lbs)
Ice Capacity	2.6kg (5.7 lbs)
Condenser Chamber Capacity	3.8kg (8.4 lbs)
Condenser Diameter	160 mm 6.3"
Condenser Height	190 mm 7.5"
Interface Connections	RS232-C Interface (when used with HSC500 PLUS controller)
Temperature Display	Ambient to 120°C (-184°F)
Temperature	+5 to 32°C (+41 to 89.6°F)
Sound Level dBA	≤ 51
Ice Condenser Material	AISI 316 Stainless Steel
Display Parameters	Status Indicator (Alarm/ Wait / OK)
Refrigerants	R507/R1150
External Dimensions H x W x D	335 x 800 x 480 mm 13.2 x 31.5 x 18.9 in
Weight	53 kg, (116.3 lbs)

### Ordering Information

Cat No.  
88001500  
88001551

Description  
Heto PowerDry LL1500 Freeze Dryer  
Heto PowerDry LL1500 Freeze Dryer

Power Requirements  
230V / 50Hz  
115V / 60Hz