

Freezemobile™

Research Freeze Dryer



Freezemobile™ 25L shown with manifold.

Key Features

- Compact, freestanding, mobile design
- Includes microprocessor-based Sentry 2.0 controller
- Wide variety of optional manifolds, shelves and accessories available
- Optional filter traps available to protect the vacuum pump from corrosive solvents

Refrigerant Information

	Gas 1	Gas 2
F Gas	R407C	R508B
GWP	1774	13396
EPA SNAP	IPR/VLTR	IPR/VLTR
Safety Class	A1	A1
Total CO ₂ E	4.701	

Specifications

	EL
Lowest condenser temperature (50 Hz / 60 Hz)	-82°C / -85°C
Lowest freezing temperature with optional shelf bath (50 Hz / 60 Hz) [†]	-67°C / -70°C
Maximum Condenser Capacity	25 L
Condenser Surface Area	506 in ² (3,264 cm ²)
Maximum ice condensing capacity in 24 hours [†]	12 L
Maximum deposition rate [†]	0.5 L/hr
Condenser pull-down from 20°C to -45°C	≤ 25 minutes
Number of compressors	2
Compressor horsepower	1.0, 1.0
Vacuum time to 100 mTorr	≤ 20 Minutes
Lowest system vacuum [§]	≤ 20 Minutes
Average defrost time	≤ 60 minutes

Note: Performance specifications are based on SP test data from units operating at an ambient room temperature of approximately 20°C. SP recommends an optimum operating range of 15-25°C (59-77°F).

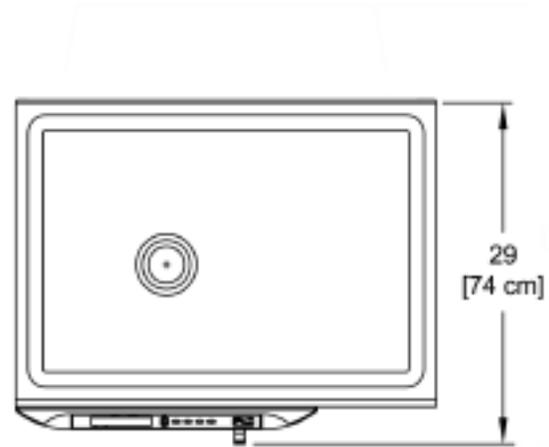
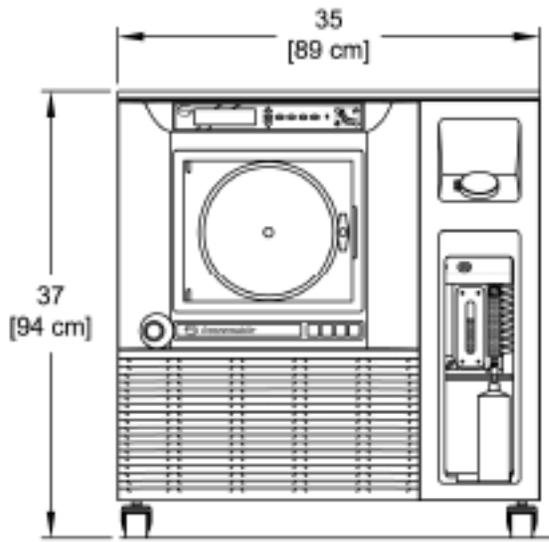
Electrical Requirements

	EL	
Voltage	208 -240 VAC	200 -220 VAC
Hertz	50 / 60 Hz	50 Hz
Breaker Amperage*	20 A	20
Phase	1Φ	3
Receptacle [§]	6 -20R*	L15-20R

Note: Other electrical configurations available.

Utility Requirements

	EL
Approx. peak heat generated	8,500 BTU/h (2.5 kW)



Dimensional Data

Width	35 in (89 cm)
Depth	29 in (74 cm)
Height	37 in (94 cm)
Weight	280-495 lb (127-225 kg)

Additional Information

Construction	316L stainless steel condenser chamber
Vacuum pump (required, not incl.)	Two-stage rotary vane
Defrost type	Hot gas
Refrigerant Type	CFC-free

Optional Components



Vertical Manifold Assembly
4-, 8-, 12-, 24- or 48-Port
Stainless Steel Vertical
Manifold



Horizontal "T" Manifold
1-, 2- or 3-Tier Stainless Steel
Horizontal "T" Manifold

Note: Additional standard and custom accessories are available, along with flask adapters, glassware and other components. Contact SP for more information.

* Receptacle configuration for 50 Hz units varies by country.

† The specified Maximum Ice Condensing Capacity in 24 Hours and Maximum Deposition Rate are based on the process of freeze-drying water as aggressively as possible. The freeze dryer's ability to collect ice at an hourly rate or over a specified period will always be application dependent.

Note: The refrigerants and insulating foam contain fluorinated greenhouse gases.



935 Mearns Road, Warminster, PA 18974 USA | scientificproducts.com
+1-800.523.2327 | hello@scientificproducts.com

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