

# Freezemobile™ 25L

## 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
Charge (Kg)	0.792	0.246
GWP	1774	13396
EPA SNAP	IPR/VLTR	IPR/VLTR
Safety Class	A1	A1
Total CO2e (t)	4.701	

### Specifications

	EL
Lowest condenser temperature (50 Hz / 60 Hz)	-82°C / -85°C
Lowest freezing temperature with optional shell bath (50 Hz / 60 Hz)	-67°C / -70°C
Maximum condenser capacity	25 L
Condenser surface area	506 in <sup>2</sup> (3,264 cm <sup>2</sup> )
Maximum ice condensing capacity in 24 hours <sup>†</sup>	12 L
Maximum deposition rate <sup>†</sup>	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 <sup>§</sup>	≤ 20 minutes
Lowest system vacuum <sup>§</sup>	≤ 15 mT
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).*

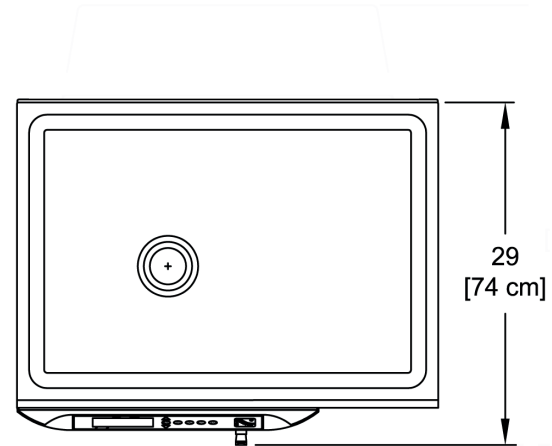
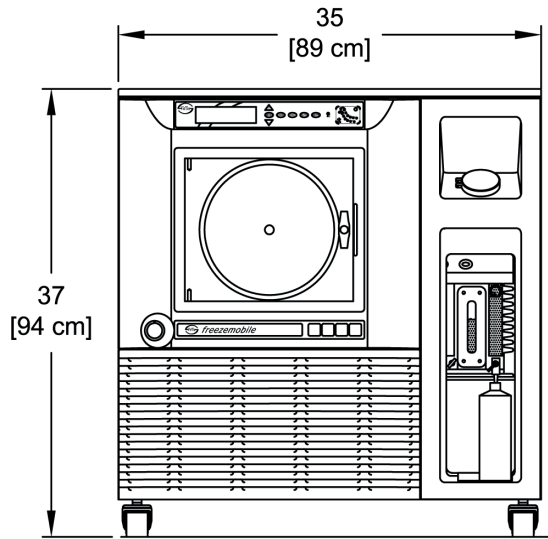
### Electrical Requirements

	EL	
Voltage	208-240 VAC	200-220 VAC
Hertz	50 Hz 60 Hz	50 Hz
Phase	1 Φ	3
Breaker amperage	20 A	20
NEMA receptacle	6-20R <sup>*</sup>	L15-20R

*Note: Other electrical configurations available.*

### Utility Requirements

	EL
Approximate 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)
Approximate weight range	280-495 lb (127-225 kg)

### Additional Information

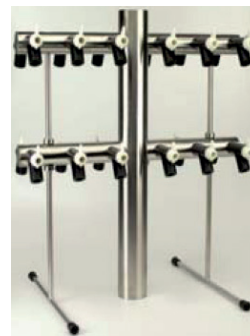
Construction	316L stainless steel condenser chamber
Vacuum pump (required, not incl.)	Two-stage rotary vane
Defrost type	Hot gas
Refrigerant type	CFC-free

### 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.