

# VirTis Freezemobile 35L

## Research Freeze Dryer



### Key Features

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

### Electrical Requirements

Item	XL	EL
Voltage (VAC)	208 / 240	208 / 240
Hertz	50, 60	50, 60
Phase	1	1
Breaker Amperage	20	30
NEMA Receptacle	6-20R*	L6-30R*

### Utility Requirements

Item	XL	EL
Approx. Peak Heat Generated (BTU/h)	7,200	9,800

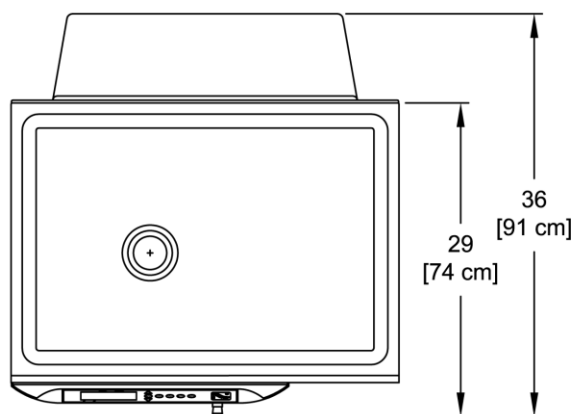
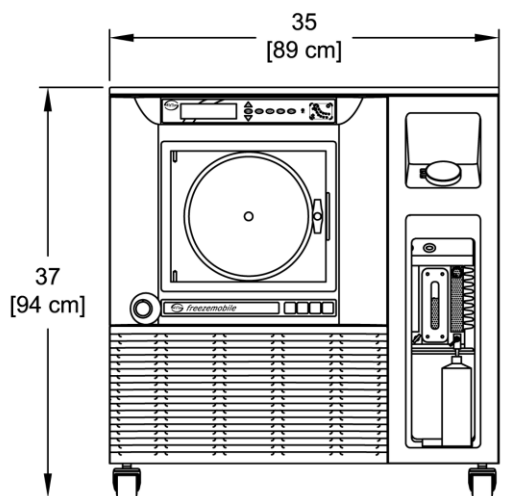
### Performance Specifications

Item	XL	EL
Lowest Condenser Temperature (50 Hz / 60 Hz, °C)	-67 / -70	-82 / -85
Lowest Freezing Temperature with Optional Shell Bath (50 Hz / 60 Hz, °C)	-52 / -55	-67 / -70
Maximum Condenser Capacity (L)	35	35
Condenser Surface Area (in <sup>2</sup> / cm <sup>2</sup> )	750 / 4838	750 / 4838
Maximum Ice Condensing Capacity in 24 hours (L) <sup>†</sup>	20	20
Maximum Deposition Rate (L/hour) <sup>†</sup>	0.83	0.83
Condenser Pull-Down from 20 °C to -45 °C (minutes)	≤ 25	≤ 25
Number of Compressors	1	2
Compressor Horsepower	1.5	1.5, 1.0
System Refrigerant	R245fa / R508B	R508B, R407C
Vacuum Time to 100 Millitorr (minutes)	≤ 20	≤ 20
Lowest System Vacuum (mT)	≤ 15	≤ 15
Average Defrost Time (minutes)	≤ 60	≤ 60

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

# VirTis Freezemobile 35L

## Research Freeze Dryer



### Dimensional Data

Width	35 in (89 cm)
Depth	36 in (91 cm)
Height	37 in (94 cm)
Approximate Weight Range	450-500 lb (205-225 kg)

### Additional Information

Construction	316L Stainless Steel Condenser Chamber
Vacuum Pump (required, not included)	Two-Stage Rotary Vane
Defrost Type	Hot Gas
Refrigerant	CFC-Free

### Optional Components



**Acrylic Drum Manifold**

12 Port Acrylic Drum Manifold; 12 Inch Outside Diameter (OD)



**Stainless Steel Drum Manifold**

12 or 18 Port Stainless Steel Drum Manifold



**Bulk Shelf Rack**

3, 4 or 5 Shelves; Heated or Unheated



**Stoppering Assembly**

1, 2 or 3 Shelves; Heated or Unheated



**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 Scientific 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.