

# VirTis BenchTop Pro with Omnitronics™ - 8L

## Benchtop Freeze Dryer



(BenchTop Pro 8L with optional tree-type manifold and condensate pan kit shown).

### Key Features

- Direct chamber, flask and/or rack drying capabilities.
- PLC-based Omnitronics™ controller.
- Choice of refrigeration system to meet various process requirements.
- Optional manifolds, racks and accessories available.

### Optional Components

- Stoppering-Tainer (SC-1 Stainless Steel).
- Stainless Steel Drum Manifold (18-Port).
- Tree-Type Stainless Steel Manifold (8- or 12-Port).
- Stainless Steel Vertical Manifold (12-Port).
- Bulk Shelf Rack (Unheated or 35 °C Heated).<sup>¶</sup>
- Vertical Acrylic Drum Manifold (8- or 12-Port).

**Note:** Additional accessories, as well as flask adapters, glassware and other components are available. Contact SP Scientific for more information.

### Performance Specifications

	XL	ZL
Lowest Condenser Temperature (°C) (50 Hz / 60 Hz)	-72 / -75	-102 / -105
Maximum Condenser Capacity (L)	8	8
Maximum Ice Condensing Capacity in 24 hours (L) <sup>†</sup>	3	3
Maximum Deposition Rate (L/hour) <sup>†</sup>	0.13	0.13
Number of Compressors	1	2
Compressor Horsepower	3/8	1/3, 3/8
System Refrigerant	R245fa/R508B	M089/R1150
Average Vacuum Time to 100 Millitorr (minutes)**	18	18
Lowest System Vacuum (mT)**	≤ 20	≤ 20

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

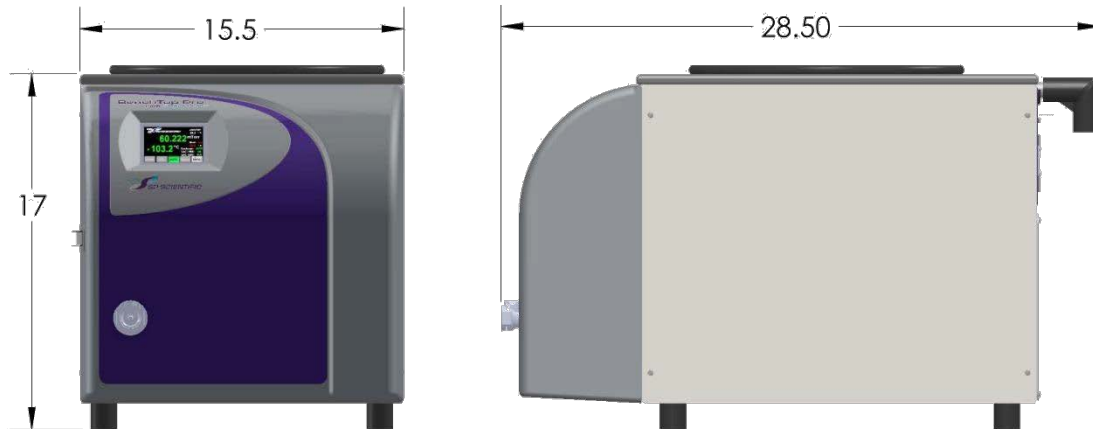
### Utility Requirements

	XL	ZL
<b>With Vacuum Pump</b>		
Approx. Peak Heat Generated (BTU/h)	3,500	4,500
<b>Without Vacuum Pump</b>		
Approx. Peak Heat Generated (BTU/h)	2,500	3,500

### Electrical Requirements

	XL			ZL		
	100-120	208-230	200-240	100-120	208-230	200-240
Voltage (VAC) <sup>‡</sup>	100-120	208-230	200-240	100-120	208-230	200-240
Hertz	50, 60	60	50	50, 60	60	50
Phase	1	1	1	1	1	1
Breaker Amperage	15	10	10	20	15	15

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## Dimensional Data

Width (in / cm)	15.5 / 39.4
Depth (in / cm)	28.5 / 72.4
Height (in / cm)	17 / 43.2
Approximate Weight (lb / kg)	131 / 59.4
Condenser Inside Diameter (in / cm)	12 / 30.5

## Additional Information

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

## Materials of Construction

Condenser Chamber	304
Condenser Chamber Cover / Adapter Plate	Acrylic
Condenser Chamber Gasket	Neoprene Split-ring
Bulk Rack Shelves	304 Stainless Steel
Drum Manifold	Acrylic or 304 Stainless Steel
Vertical and Tree-Type Manifolds	316L Stainless Steel
Drum Manifold Gasket	Neoprene Split-ring
Quickseal Body	Neoprene
Quickseal Knob	Polypropylene



**Stoppering-Tainer**  
SC-1 Stainless Steel



**Drum Manifold**  
18-Port Stainless Steel Drum Manifold



**Tree-Type Manifold**  
8- or 12-Port Stainless Steel Manifold



**Vertical Manifold**  
12-Port Stainless Steel Vertical Manifold



**Bulk Shelf Rack**  
3 Shelves; Unheated or 35 °C Heated



**Vertical Drum Manifold**  
8- or 12-Port Acrylic Drum Manifold

† 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.

\*\* Vacuum specifications are based on SP Scientific test data from similar units equipped with an Leybold D2,5E two-stage rotary vane vacuum pump. Units equipped with other vacuum pumps may yield different results.

‡ NEMA plug type is selected at time of sale.

§ 35 °C heated bulk shelf rack is available with a 12-port acrylic drum manifold only.