VirTis BenchTop Pro with Omnitronics™ - 9L

Benchtop Freeze Dryer

(BenchTop Pro 9L 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).\\
- 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

	ES	EL
Lowest Condenser Temperature (°C) (50 Hz / 60 Hz)	-52 / -55	-82 / -85
Maximum Condenser Capacity (L)	9	9
Maximum Ice Condensing Capacity in 24 hours (L)†	5	5
Maximum Deposition Rate (L/hour)†	0.21	0.21
Number of Compressors	1	2
Compressor Horsepower	1/3	1/3, 3/8
System Refrigerant	MO89	R407C/R508B
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

	ES	EL
With Vacuum Pump Approx. Peak Heat Generated (BTU/h)	3,500	4,500
Without Vacuum Pump Approx. Peak Heat Generated (BTU/h)	2,500	3,500

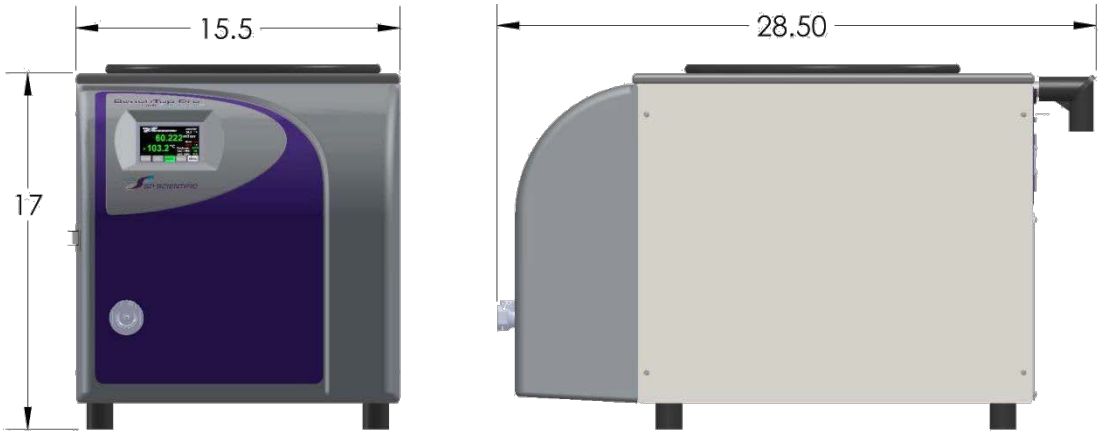
Electrical Requirements

	ES			EL		
Voltage (VAC)‡	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

3538 Main Street, Stone Ridge, NY 12484 USA 845.255.5000
800.431.8232 Fax: 845.687.7481 www.SPScientific.com

VirTis BenchTop Pro with Omnitronics™ - 9L

Benchtop Freeze Dryer



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	Internal Coil

Materials of Construction

Condenser Chamber	304
Internal Condenser Coil	316L Stainless Steel
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.

Part Number 100007473
Rev 001, 03/13