

BenchTop Pro 8L

Benchtop Freeze Dryer with Omnitronics™



Specifications

	ZG
Lowest condenser temperature (50 Hz / 60 Hz)	-102°C / -105°C
Maximum condenser capacity	8 L
Maximum ice condensing capacity in 24 hours†	3 L
Maximum deposition rate†	0.13 L/hr
Number of compressors	2
Compressor horsepower	1/3, 3/8
Average vacuum time to 100 mTorr**	18 minutes
Lowest system vacuum**	≤ 20 mT

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).

Utility Requirements

	ZG
With vacuum pump (Approx. peak heat generated)	4,500 BTU/h (1.3 kW)
Without vacuum pump (Approx. peak heat generated)	3,500 BTU/h (1.0 kW)

Electrical Requirements

Voltage†	100-120 VAC 88-98 VAC	208-230 VAC	200-240 VAC
Hertz	50 Hz 60 Hz	60 Hz	50 Hz
Phase	1 Ø	1 Ø	1 Ø
Breaker amperage	20 A	15 A	15 A

Optional Components

Stainless steel drum manifold (18-port)
Tree-type stainless steel manifold (8- or 12-port)
Stainless steel vertical manifold (12-port)
Bulk shelf rack
Stoppering-tainer (SC-1 stainless steel)

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



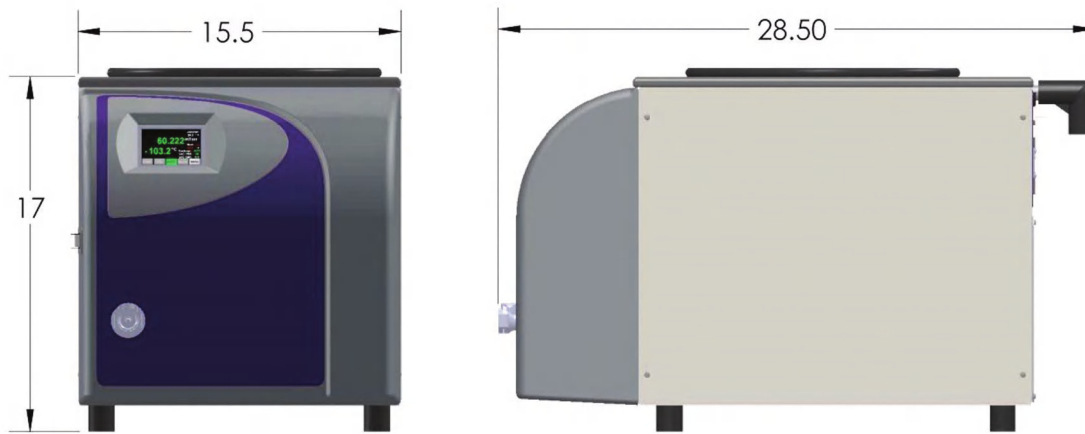
Shown with optional tree-type manifold and condensate pan kit.

Key Features

- Direct chamber, flask and/or rack drying capabilities
- PLC-based Omnitronics™ controller
- Optional manifolds, racks and accessories available

Refrigerant Information

	Gas 1	Gas 2
F gas	R449A	R1150
Charge (Kg)	0.300	0.021
GWP	1400	4
EPA SNAP	IPR	Special
Safety Class	A1	A3
Total CO2e (t)	0.420	



Dimensional Data

Width	15.5 in (39.4 cm)
Depth	28.5 in (72.4 cm)
Height	17 in (43.2 cm)
Approximate weight	126 lb (57 kg) • ZG
Condenser inside diameter	12 in (30.5 cm)

Materials 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

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

Optional Components



Drum manifold

18-port stainless steel



Tree-type manifold

8- or 12-port stainless steel manifold



Horizontal manifold

Trays and ports



Bulk shelf rack

3 shelves



Drum manifold

8- or 12-port acrylic

† 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 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.

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