Genesis 30

Pilot Freeze Dryer

vwr part of avantor | order on vwr.com

SP VirTis

Precision. Flexibility. Reliability.

Genesis 30 is designed to make freeze-drying simpler, faster, and more consistent. Built for research, diagnostics, tissue engineering, and small production, this system adapts to your workflow while delivering dependable, high-quality results..

Key Features & Benefits

- **Compact, Space-Saving Design** Easy to install with a narrow footprint. Cleanroom configuration **available for labs with strict requirements or room classification**
- **Improved Software Interface**
  Integrated LyoLogic® allows for a better customer experience and interface to aid in **improving cycle development and reducing cycle times**
- **Single Product Chamber**
  Up to 6 shelves with stoppering ability for research development of your important freeze dried products
- **Greater Flexibility**
  Single or multiple shelf latching **in seconds**, and for research in **multiple container sizes**
- **Expanded Accessory Compatibility**
  Adaptable to a wide range of accessories for flexible integration into **diverse workflows**
- **Smooth-Walled Condenser**
  Ease of cleaning and allows for **rapid turn around** from cycle to cycle
- **Intuitive Control Systems**
  Available with Merlin or LyoLogic® HMI systems for **intuitive, precise operation and increased functionality**. LyoLogic® also avaiable in 21 CFR capable version
- **Lower GWP Refrigerants**
  Environmentally friendly CFC-free refrigerants optimize cooling efficiency and system reliability

Why Genesis 30?

- **Flexibility - easily adapt to accommodate various container formats**
- **Supports a wide range of lab workflows and applications**
- **Comprehensive training options**
- **Complete service solutions**
- **Fits in the space of a common laboratory refrigerator**
- **Offered in wide or narrow space saving configurations**
- **Fast turn around from one cycle to another**
- **Customizable - can be fitted with various options for your budget and needs**

Genesis 30 Pilot Freeze Dryer

SP VirTis

Specifications

Lowest shelf temperature (50 Hz / 60 Hz)	≤ -67°C / -70°C
Shelf temperature control range*	-55 to 65°C
Shelf Temperature Control Range Tolerance	+/- 0.5 °C
Vacuum Level Control Range	0.067 – 0.67 mbar (50 – 500 mTorr)
Volume-based leak rate§	≤ 0.0042 mbar⍰L/ sec (≤ 3.2 mTorr⍰L/ sec)
Lowest system vacuum§	≤ 0.2 mbar (≤ 15 mTorr)

Refrigerant Information

	Gas 1	Gas 2
F Gas	R1270	R170
GWP	2	6
EPA SNAP	IPR	VLTR
Safety Class	A3	A3
Total CO_2E	0.003 (AC); TBD (WC)	

Electrical Requirements

Voltage	Phase	Frequency	Breaker Amperage	Recommended Outlet	Peak Current	Peak Power
208 VAC	1 Φ	60 Hz	30 A	NEMA 6-30R	TBD	TBD
230 VAC	1 Φ	50 Hz	30 A	NEMA 6-30R	27 A	6,500 VA
400 VAC	3 Φ	50 Hz	20 A	N/A	TBD	TBD

Shelf Configuration

Number of Shelves	Shelf Clearance	Recommended Vials†
3 Shelves	104.7 mm (4.12 in)	30R or Smaller
4 Shelves	76.7 mm (3.02 in)	20R or Smaller
5 Shelves	59.8 mm (2.35 in)	6R or Smaller
6 Shelves		2R or Smaller

Utility Requirements

	Air-Cooled	Water-Cooled
Compressed air (for units with isolation valve)	80 psig (5.5 bar)	
Inert Gas for Backfilling	1 PSIG (70 mbar or 7 kpa)	
Ambient Room Temperature	15 -25°C (59 -77°F)	
Cooling Water	N/A	4-12 Lpm (1-3 gpm) 5-25°C, 2-4 bar (30-60 psi)
Heat Output Room, Peak	11,500 BTU/h (3.4 kW)	4,100 BTU/h (1.2 kW)

Additional Information

Construction	316L stainless steel shelves, product chamber and condenser chamber
Defrost type	Hot gas
Vapor port	15.2 cm (6 in) Standard 2 cm (8 in) Narrow / Cleanroom
Temperature uniform	± 1.0°C 20.3
Noise Level	75 dBA

	Standard Configuration	Narrow Configuration	Cleanroom Configuration
Max. weight	363 kg (363 lb)	386 kg (850 lb)	
Max. weight crated (est.)	543 kg (1,200 lb)	566 kg (1,250 lb)	

Specifications 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).For full specifications please contact your regional product specialist.

§ Vacuum specifications are based on Scientific Products test data from similar units equipped with a two-stage rotary vane vacuum pump.

** Shelf fluid inlet temperature controlled to within ± 0.5°C of the setpoint within the Shelf Temperature Control Range when at 100 mTorr.*