

## MASTER PRODUCT

# FreeZone 6 Liter Console Freeze Dryers

99 /100 11,566 Citations



## All Features & Specifications

### Features (All Models)

- Upright stainless steel collector coil capable of holding 6L of ice before defrosting. Acrylic collector lid, 3/4" thick, has neoprene gasket.
- Console cabinet with interior space for vacuum pump (sold separately) and two-piece, removable front panel with viewing window.
- Clear acrylic chamber lid, 3/4" thick, with neoprene gasket.
- Brushed stainless steel and glacier white, powder-coated steel exterior with blue accents.
- Full color, 5" capacitive touchscreen with Lyo-Works™ OS:
  - Real time display of collector temperature, vacuum level, and optional End-Zone™ end point detection system.
  - Start-up mode for collector cool-down and vacuum pull-down (automatic or manual).
  - Operating mode (standby or run).

- Vacuum set point, alerts, diagnostic tests, user manual, defrost control, and optional drying accessory parameters.
  - Data logging stores and displays data in table or chart format, and may be exported via USB or Ethernet.
  - Settings include language (English, Spanish, French, German, or Italian), time, time zone, temperature (° C or ° F), and vacuum (mBar, Torr, or Pa).
  - Alerts are programmable to send via Ethernet connection to user-entered email addresses.
  - Display settings include brightness, touch sounds (on/off), and screen time out in minutes (on/off).
  - Maintenance alert settings include vacuum pump oil change, refrigeration cleaning, total operating hours and line voltage offset.
  - Level-specific security lock-out prevents changes to programs and other system parameters.
- Hot gas defrost with auto shut off at +60° C (+140° F).
  - On/standby switch.
  - Moisture sensor that prevents refrigeration or vacuum start-up when moisture is detected in the drain line.
  - Vacuum control valve that maintains vacuum level set point.
  - Vacuum break valve that bleeds air into the system when power to the freeze dryer or vacuum pump is shut off. If a power outage less than approximately 5 minutes occurs, the freeze dryer will restart and the refrigeration and vacuum system will resume operation once power is restored. If the power failure is more than approximately 5 minutes and the collector warms above safe limits, the freeze dryer will not automatically restart.
  - Side-mounted USB port and rear-mounted Ethernet connection.
  - Front-mounted, quick-disconnect drain hose fitting and side-mounted lanyard with hose connector. 18", 1/4" ID silicone tubing and clamp included.
  - Internal electrical receptacle for vacuum pump connection.
  - 3-wire electrical cord with plug.
  - 3/4" OD vacuum connection, 36" of 3/4" ID vacuum hose and two clamps.

### Options Include

- PTFE-coated collector coil and chamber for processing involving corrosive compounds.
- Purge valve for isolating the vacuum pump from the freeze dryer.
- Built-in stainless steel mini vacuum drying chamber that includes 50-watt heater with microprocessor control to +60° C (+140° F), 3/4" thick clear acrylic lid and neoprene gasket. (Chamber is not cooled.)

- Built-in shell freezer with stainless steel bath that includes 1/2 hp HCFC/CFC-free refrigeration system capable of cooling the heat transfer solution to -40° C (-40° F), 3/4" thick high-density polyethylene lid, neoprene gasket and front-mounted, quick disconnect drain hose fitting and 18", 1/4" ID silicone tubing with clamp.
- Region-specific electrical plug configurations.

**Required Accessories (Not Included)**

- Vacuum pump with a displacement of at least 98 L/min, 0.02 mBar ultimate pressure and fitting suitable for 3/4" ID vacuum hose.
- Tray dryer or other drying accessory.
- Freeze dry glassware if not bulk freeze drying.