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advanced automated
peptide protein technologies

Spirit of Innovation



Sharp Freeze™ -110

Freeze Dryer/Trap



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The Sharp Freeze™-110 is a flexible, compact lyophilizer with unsurpassed reliability and performance that maintains a constant low temperature of -110 °C. The highly insulated chamber at a working temperature of -110 °C, efficiently traps all vapors and prevents any vapors from escaping.

Due to the constant -110 °C temperature, this freeze dryer:

- Produces lower vacuum pressure
- Increases efficiency of lyophilization
- Ensures a longer working life of the pump and vacuum system
- Provides energy efficiency

The Sharp Freeze™-110 has dual compressors for greater efficiency and includes a step start feature to preserve the life of the compressors and maintain a constant temperature at the various stages of operation. An optional Pirani gauge provides precise digital pressure readout for controlling the freeze drying process. Utilizing the optional RS232C port, the condenser temperature can be automatically monitored and recorded at all times.

The 4-liter condenser chamber is constructed of seamless stainless steel for easy leak-free operation. A drain valve allows fast cleaning and easy emptying of the condenser, and a special glass trap is available for trapping highly corrosive chemicals.

For greater than 4-liter condenser chamber, please ask.



Freeze Dryer Cold Trap

Ideal for the following applications:

- Freeze dry from round bottom flasks
- Shelf freeze dryer
- Cold trap for any vacuum source

Also compatible with:

- Vacuum dryers
- Rotary evaporators
- ACTEvap



Accessories

- **Freeze Dryer Manifold (P/N AAP100101)**
Manifold has four ports. Each port equipped with 3/4 inch (1.9 cm) rubber valves. Capacity can be increased with Manifold extension.
- **Manifold Extension (P/N AAP100102)**
Freeze dryer manifold extension for added capacity. Extension has four ports equipped with 3/4 inch (1.9 cm) rubber valves.
- **Aluminum Connector Cones (P/N AAP100110)**
3/4 inch (1.9 cm) aluminum cones for connecting glassware to freeze dryer manifold.
- **VacGuide Pirani Gauge (P/N AAP100120)**
Precise digital measurement and readout of pressure for controlling freeze-drying process. Gauge is to be fitted directly onto Sharp Freeze™-110 or mounted on different rack options.
- **Vacuum Chamber (P/N AAP100103)**
Vacuum chamber with two stainless steel shelves.
- **Glass Condenser Trap (P/N AAP100201)**
Special glass trap for use with corrosive chemicals.
- **Acrylic Trap Lid (P/N AAP100100)**
Acrylic condenser lid with connector to vacuum pump for utilizing Sharp Freeze™-110 as a cold trap.
- **Casters (P/N AAP100103)**
Locking caster assembly allows for mobility on lab workspaces.



Freeze Dryer
Manifold
AAP100101



Manifold
Extension
AAP100102



Aluminum
Connector Cone
AAP100110



Vacuum
Chamber
AAP100103



Acrylic
Trap Lid
AAP100100

Sharp Freeze™-110

SPECIFICATIONS

| Type: | Sharp Freeze™-55 (For high boiling solvents) | Sharp Freeze™-110 (For low boiling solvents) |
|----------------------------------|---|---|
| Part Number: | AAP101055 | AAP101110 |
| Ultimate Temperature: | -55 °C | -110 °C |
| Total Volume: | 4 L | 4 L |
| Height: | 21 inches (53 cm) | 21 inches (53 cm) |
| Width: | 15.75 inches (40 cm) | 15.75 inches (40 cm) |
| Depth: | 20 inches (50 cm) | 20 inches (50 cm) |
| Cooling Capacity: | 2 kg/hour | 2 kg/hour |
| Power: | 115 V / 60 Hz | 115 V / 60 Hz |
| Power Consumption: | 200 W | 400 W |
| Condensor Material: | Stainless Steel AISI 316 | Stainless Steel AISI 316 |
| Weight: | 88 pounds (40 kg) | 121.25 pounds (55 kg) |
| Digital Temperature Read-out: | Yes | Yes |
| Microprocessor Control: | Yes | Yes |
| Overload and Malfunction Alarms: | Yes | Yes |
| Compressor Start Delay: | Yes | Yes |



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aapptec offers many different products and product accessories for all your peptide needs. Please contact us for more information.

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