

## The Smarter -70°C Pallet Freezer -40°C to -70°C



- ✓ **The only** -70°C forced air circulation pallet freezer
- ✓ 8,806 Liters / 311 cu.ft. of storage space
- ✓ ULC only requires 6.28 m<sup>2</sup> / 67.5 sq. ft. of floor space
- ✓ Best uniformity on the market +/- 3.0°C @ -70°C
- ✓ Redundant refrigeration system
- ✓ Fastest temperature recovery from door opening
- ✓ Exceptional performance
- ✓ Energy balance design
- ✓ Dynamic refrigeration control
- ✓ Smarter storage solution
- ✓ Refrigeration cooling assist mode function

*“Farrar’s ULC-P Pallet freezer will revolutionize long term storage”*

### Overview

- ◆ Specifically designed for Pharmaceutical, CDMO’s and CRO’s
- ◆ Largest volume space available for a -70°C freezer
- ◆ Temperature operating range -40°C to -70°C
- ◆ Smallest foot print with largest storage volume
- ◆ Forced-air circulation provides fastest temperature recovery from door opening
- ◆ Fully redundant systems offer peace of mind (display, electrical, refrigeration and controls)
- ◆ Optional racking/shelving system available

# ULC-P Specifications

## Application and Electrical Requirements

Application	Pharmaceutical / CDMO's and CRO's
Chamber Volume	311 cu.ft. / 8,806 l
Temperature Range	-40°C to -70°C
Electrical	208-230 VAC, 1 Ø, 60Hz
Circuit Breaker	2 x 30 amp
Ambient Operating Temperature	+18°C to +30°C

## Storage Capacity / Dimensions

Total Volume	311 cu.ft. / 8,438 l
Door Opening Size/ QTY	41" x 87" / 2 (W x H) 1041.4 x 2209.8 mm
Pallet Capacity (Euro Pallet)	2 - 32" x 47" x 50" (W x D x H) 2 - 813 x 1194 x 1270 mm 4 - 32" x 47" x 36" (W x D x H) 4 - 813x 1194 x 914.4 mm
Area Footprint	67.5 sq.ft./ 6.28 m <sup>2</sup>
Interior Dimensions	110 x 54 x 90 in (W x D x H) 2794 x 1371 x 2286 mm
Exterior Dimensions	122 x 66 x 143 in (W x D x H) 3098 x 1676x 3632 mm
Unit Weight	3,900 lbs. / 1,769 Kg
Shipping Weight	4,500 lbs. / 2,132 Kg

## Performance Data

Uniformity Air Temperature	+/- 3.0°C (empty chamber)
Temperature Control	+/- 1.0°C
Warranty	1 Year Parts & Labor

## Refrigeration System

Evaporator/QTY	Forced - Air / 2
Condenser/QTY	Forced - Air Cooled / 2
Metering Device	Electronic
High Stage/ Low Stage	R-449A / R-508B
Air Cooled Condenser Requirements	+18°C to +30°C
Water Cooled Condenser Requirements	Tower Water 85°F (29.5°C), Max. flow rate 7gpm (26.5 l/min). Chilled Water 45°F (7.2°C), Max. flow rate 3.5 gpm (13.25 l/min).

## Controller

Temperature Controller/QTY	Microprocessor/ 2
Display/QTY	LCD/ 2
Sensor/QTY	RTD PT100 Din A/ 2
Alarms	High/Low temperature, door ajar, power failure, remote alarm contacts
Dry Contacts	Standard (C, NO, NC)

## Key Features

- 70°C forced air evaporator
- Operating Temperature -40°C to -70°C
- Best temperature uniformity on the market (+/- 3.0°C)
- Fully redundant systems
- Small foot print
- Low temperature deviation (+/- 1°C)



Ultra-Low Refrigeration Engineering