

*Ultra Freeze*  
*Deep Freeze*  
*Low Freeze*



Largest Manufacturer of Ultra Low freezers

## ULTRA LOW FREEZERS (-80°C) *Ultra Freeze*



- Cryo Scientific offers a wide range of Ultra Freeze in upright and chest models to suit individual needs
- Ultra Freeze has an advanced cascaded refrigeration technology using latest Brazed Plate Heat Exchanger for superior cooling efficiency
- Ultra Freeze uses only CFC-free, HCFC-free, eco-friendly HFC refrigerants
- Stainless steel shelves (Adjustable / Fixed) & interior and corrosion resistant CRCA exterior with attractive polyester powder coat
- Microprocessor based control system with digital display of set and process temperatures. Also, has password protection against unauthorized use
- Fast response Pt-100 RTD sensor ensures quick control and observation of real time temperature
- Audio-visual alarms for temperature deviation (High & Low) and power failure
- Automatic voltage stabilizer & MCB to provide absolute safety
- Low battery and hot condenser lamp indicators (optional)
- Battery back-up (Rechargeable) for temperature display, alarms and chart recording during power failure (optional)
- Enhanced safety features include electronic interlock between two stages of refrigeration, time-delay start, over-load protection and fuses for refrigeration and control systems. Automatic voltage stabilizer ensures High / Low voltage cut-off & time-delay restart
- Range of optional accessories are inventory systems (cryo boxes / racks), cryo glove, temperature recorder, RS 232/485 communication port, remote alarm contact, etc
- DQ / IQ / OQ / PQ documentation and GMP models with both side stainless steel (SS 316 / SS 304) models are also available on request
- For temperature back-up, we offer liquid Co<sub>2</sub>/ Cryo Coolant cassettes and back-up (standby) refrigeration system
- Cryo Coolant cassettes are rectangular anodized aluminium cassettes with special cryogenic coolant inside to protect the samples in frozen condition over a period of 24 - 36 hours during power failure
- Back-up refrigeration models have built-in standby cascade refrigeration system to work in tandem and as standby



**Cabinet Insulation**  
150mm thick high density foamed-in-place PUF insulation

**Evaporator**  
High Purity, heavy gauge, copper coils for optimum heat transfer

**Latch**  
Sleek & Low profile latch for tight closure

**Door Handle**  
Sleek handle for easy door opening

**Main door**  
PUF insulated (110mm) outer door with magnetic rubber gaskets for tight seal

**Lock**  
Aesthetically designed keyed lock

**Filter**  
Washable condenser filter for easy maintenance

**Castors**  
Heavy duty swivel castors for easy mobility with brakes

**Hot line**  
Around mouth of cabinet to prevent moisture condensation

**Exterior**  
Heavy duty CRCA Sheet, corrosion resistant, attractive polyester powder coated

**Inventory System**  
Stainless steel Cryo racks with dividers and Cryo boxes (optional)

**Interior & Shelves**  
Stainless steel (SS304/SS316) interior & shelves, (Adjustable / Fixed)

**Poly acrylic Sub doors**  
Prevent loss of cold air during door opening

**Control Panel**  
Microprocessor based temperature controller and alarm functions

**Recorder**  
Microprocessor based weekly circular chart temperature recorder (optional)

**Air-cooled condenser**  
High purity copper tubes with grooved aluminium fins

**ULTRA LOW FREEZER - TEMPERATURE RANGE: -50°C to -86°C**

**UPRIGHT MODELS**

MODEL NO	VOLUME (Ltr)	INNER DIMENSION (H x W x D) mm	OUTER DIMENSION (H x W x D) mm
URC-V-170-4	170	900 x 380 x 500	1700 x 680 x 830
URC-V-270-4	270	900 x 500 x 600	1700 x 800 x 930
URC-V-380-4	380	1000 x 620 x 610	1800 x 920 x 940
URC-V-500-4	500	1200 x 620 x 670	2000 x 920 x 1000
URC-V-570-4	570	1200 x 620 x 770	2000 x 920 x 1100
URC-V-700-4	700	1200 x 760 x 770	2000 x 1220 x 1100

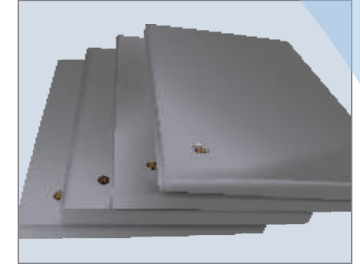
**CHEST MODELS**

MODEL NO	VOLUME (Ltr)	INNER DIMENSION (L x W x H) mm	OUTER DIMENSION (L x W x H) mm
URC-H-185-4	185	380 x 1180 x 420	680 x 1930 x 795
URC-H-250-4	250	380 x 1180 x 550	680 x 1930 x 925
URC-H-340-4	340	450 x 1250 x 600	750 x 2000 x 975
URC-H-450-4	450	600 x 1250 x 600	900 x 2000 x 975

**BACK-UP REFRIGERATION MODELS**

MODEL NO	VOLUME (Ltr)	INNER DIMENSION (H x W x D) mm	OUTER DIMENSION (H x W x D) mm
URC-V-380-4S	380	1000 x 620 x 610	1800 x 920 x 1270
URC-V-500-4S	500	1200 x 620 x 675	2000 x 920 x 1330

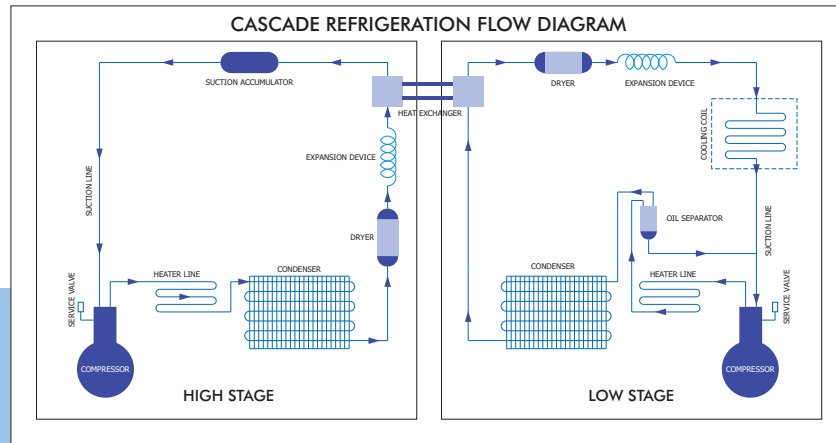
**Note: Double door Models (>380 litres) available on specific customer requirements**



**Cryo Coolant cassettes back-up**



**Backup refrigeration model**



## DEEP FREEZERS (-40°C) *Deep Freeze*

- Deep Freeze (-40°C) is ideally suited for long and medium term storage of biological products
- Available in both upright and chest models
- Efficient refrigeration using heavy duty hermetically sealed compressor and non-CFC, eco-friendly refrigerant (R-404A)
- Specially designed air-cooled condenser ensures peak performance even at high ambient conditions
- Microprocessor based control system with digital LED display of temperature. Fast response Pt-100 RTD / NTC thermistor sensor
- Stainless steel shelves (Adjustable / Fixed) & interior and corrosion resistant CRCA exterior with attractive polyester powder coat
- Foamed-in-place, PUF insulation of 100mm thickness for the cabinet and 75mm for the door
- Main door with inner FRP lining and durable magnetic gasket. Durable poly acrylic sub-doors for each compartment
- Hot line around the front of the cabinet prevents moisture condensation. Freezer mounted on smooth moving swivel castors with brakes
- Audio-visual alarms for temperature deviation and power failure
- Battery back-up for temperature indication, alarm systems and temperature recorder (optional)
- Automatic voltage stabilizer & MCB to provide absolute safety
- Optional accessories are Temperature chart recorder, Cryo Coolant cassettes temperature back-up during power failure, inventory systems (cryo racks & boxes), RS 232/485 communication port, remote alarm contact, etc
- DQ / IQ / OQ / PQ documentation and GMP models with both side stainless steel (SS 316 / SS 304) models are also available on request



**DEEP FREEZER** - TEMPERATURE RANGE: -36°C to -40°C

### UPRIGHT TYPE

MODEL NO	VOLUME (Ltr)	INNER SIZE (H x W x D) mm
URC-V-100-2	100	620 x 400 x 400
URC-V-170-2	170	900 x 380 x 500
URC-V-270-2	270	900 x 500 x 600
URC-V-380-2	380	1000 x 620 x 610
URC-V-500-2	500	1200 x 620 x 675
URC-V-570-2	570	1200 x 620 x 770
URC-V-700-2	700	1200 x 760 x 770

### CHEST TYPE

MODEL NO	VOLUME (Ltr)	INNER SIZE (L x W x H) mm
URC-H-185-2	185	380 x 1180 x 420
URC-H-250-2	250	380 x 1180 x 550
URC-H-340-2	340	450 x 1250 x 600
URC-H-450-2	450	600 x 1250 x 600

## LOW FREEZERS (-20°C) *Low Freeze*

- Low Freeze is a low temperature freezer with a range of -20°C to -25°C
- Silent, energy efficient refrigeration system with hermetically sealed compressor and eco-friendly refrigerant (R-134A)
- Specially designed air-cooled condenser (side to side) ensures that the equipment occupies very less floor space
- High density PUF insulation of 75 mm thickness for the cabinet and 60mm for the door
- Main door with heavy duty latch and magnetic rubber gasket ensures tight closure
- Low Freeze is available in both premium and economy range of Upright and Chest Models to suit individual needs
- Poly acrylic sub-doors and stainless steel interior and shelves (Adjustable / Fixed) are provided in the premium models
- Pre-coated CRCA interior and shelves (Adjustable / Fixed) are provided in the economic models
- Microprocessor based control system with audio-visual alarm for temperature deviation
- Automatic voltage stabilizer & MCB to provide absolute safety
- Optional accessories are Temperature chart recorder, Cryo Coolant cassettes temperature back-up during power failure, inventory systems (cryo racks & boxes), RS 232/485 communication port, remote alarm contact, etc
- DQ / IQ / OQ / PQ documentation and GMP models with both side stainless steel (SS 316 / SS 304) models are also available on request

### LOW TEMPERATURE FREEZER - Premium Range

#### PREMIUM RANGE

##### UPRIGHT TYPE

MODEL NO	VOLUME (Ltr)	INNER SIZE (H x W x D) mm
URC-V-170-1	170	900 x 380 x 500
URC-V-270-1	270	900 x 500 x 600
URC-V-380-1	380	1000 x 620 x 610
URC-V-500-1	500	1200 x 620 x 675
URC-V-500-1	500	1200 x 620 x 675
URC-V-570-1	570	1200 x 620 x 770
URC-V-700-1	700	1200 x 760 x 770

##### CHEST TYPE

(L x W x H) mm

URC-H-250-1	250	380 x 1180 x 550
URC-H-340-1	340	450 x 1250 x 600
URC-H-450-1	450	600 x 1250 x 600

### LOW TEMPERATURE FREEZER - Economy Range

#### ECONOMY RANGE

##### UPRIGHT TYPE

MODEL NO	VOLUME (Ltr)	OUTER SIZE (H x W x D) mm
URC-V-ECO-270-1	270	1450 x 650 x 775
URC-V-ECO-380-1	380	1550 x 770 x 805

##### CHEST TYPE

(L x W x H) mm

URC-H-ECO-300-1	300	650 x 1050 x 880
URC-H-ECO-400-1	400	650 x 1350 x 880
URC-H-ECO-500-1	500	650 x 1600 x 880

