# **Ultra Low Freezers**

# **ULF Series**

Temperature -40°C to -85°C / -40°F to -121°F

Style Chest (Horizontal) Upright (Vertical) Undercounter

### 1 ULF SERIES CHEST AND UPRIGHT ULTRA LOW FREEZERS

#### Features

- Digital temperature control with dual display and adjustable temperature range. Scan button for setting temperature and tamper proof lockout
- Quick pull-down to operating temperature with efficient and reliable cascade refrigeration. Two large
  hermetic compressors ensure rapid pull-down of product load. Because of the unique design of the
  freezers, the pressure in the refrigeration system is held very low, eliminating excessive heat build up.
  This low pressure allows the freezer to operate efficiently, extending compressor life.
- Compressor life is extended by an energy-saving low stage which operates only on demand.
- Compressors are protected with a constant flow of refrigerant
- Heat is efficiently and effectively dissipated by an air-cooled condenser with two heavy-duty fans.
   Condenser requires no liquid coolant
- Freezer has automatic timer system that restarts unit in case of power failure
- Frost and ice build-up along the gasket is minimized by a heater harness located beneath the channel
- CFC-Free R-508B and R-404A refrigerants

#### Primary Uses

- Clinics
- Research
- Small laboratories
- Hospital rooms
- Medical clinics

#### Common Specifications

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Temperature control system	Digital control displays set point and chamber temperature			
Digital alarm system with relay	Battery operated alarm system will emit an audible and visual signal when there is a mechanical or electrical failure. Alarm has over and under temperature setting, alarm silencing switch, and battery test switch. Also provided is a relay for remote alarm hook-up.			
Refrigeration system	Cascade type - Two hermetic compressors. CFC & HCFC free refrigerants			
Construction	Chamber is 14-ga. zinc coated galvanized steel.  Exterior is 16-ga. steel. Powder coated cool gray finish.			
Electrical requirements	115V, 60 Hz, 1 phase 208V, 60 Hz, 1 phase 230V, 60 Hz, 1 phase 220V, 50 Hz, 1 phase 220V, 60 Hz, 1 phase			
Optional accessories	Chart recorder, CO <sup>2</sup> and LN <sup>2</sup> back-up system, Racks, Cold safety gloves			

#### Unique Specifications for CHEST TYPE (HORIZONTAL) Ultra Low Freezers - Top Opening

Model	Capacity		Rack Capacity	Temp. Range	Internal Dimension		emp. Range Internal Dimension External Dimension		nension
	Liters	Cu. ft.			Inch	Centimeter	Inch	Centimeter	
ULF001C	56	2	6	-40°C to -85°C / -40°F to -121°F	17" x 14" x 14"	43 x 35 x 35	25.25" x 25.75" x 40"	64 x 65 x 101	
ULF101C	83	3	8	-40°C to -85°C / -40°F to -121°F	24" x 12" x 18"	60 x 30 x 45	34.5" x 25.25" x 48"	87 x 64 x 121	
ULF201C	142	5	15	-40°C to -85°C / -40°F to -121°F	30" x 18" x 16"	76 x 45 x 40	40.5" x 31" x 47"	102 x 81 x 119	
ULF301C	255	9	16	-40°C to -85°C / -40°F to -121°F	46" x 16" x 20"	116 x 40 x 50	57.5" x 29" x 46.5"	146 x 73 x 116	
ULF401C	340	12	27	-40°C to -85°C / -40°F to -121°F	55" x 19" x 20"	139 x 48 x 50	65.5" x 32" x 47.5"	166 x 81 x 120	
ULF501C	400	14	30	-40°C to -85°C / -40°F to -121°F	62" x 20" x 20"	157 x 50 x 50	72.5" x 33" x 47.5"	184 x 83 x 120	
ULF601C	480	17	36	-40°C to -85°C./ -40°F to -121°F	69" x 20" x 21"	175 x 50 x 53	81.25" x 33.5" x 48.5"	206 x 85 x 123	
ULF701C	594	21	36	-40°C to -80°C / -40°F to -112°F	81" x 21.5" x 21"	205 x 54 x 53	91" x 36" x 49"	231 x 91 x 124	
ULF801C	626	22	36	-40°C to -85°C / -40°F to -121°F	67" x 19" x 30"	170 x 48 x 76	98" x 36" x 43.5"	248 x 91 x 110	
ULF901C	766	27	48	-40°C to -80°C / -40°F to -112°F	67" x 23" x 31.25"	170 x 57 x 79	98" x 36" x 43.5"	248 x 91 x 110	

# CHEST TYPE (HORIZONTAL) Ultra Low Freezers - Top Opening



# ■ Unique Specifications for UPRIGHT TYPE (VERTICAL) Ultra Low Freezers

Model	Capacity		Rack Capacity	Shelving	Temp. Range	Internal Dimension		External Dimension	
	Liters	Cu. ft.				Inch	Centimeter	Inch	Centimeter
ULF401U	370	13	15	4 adjustable (5 compartments)	-40°C to -85°C / -40°F to -121°F	20" x 22" x 51.25	50 x 55 x 130	35" x 34.5" x 79.5"	88 x 87 x 201
ULF501U	505	18	20	4 adjustable (5 compartments)	-40°C to -85°C / -40°F to -121°F	23" x 26" x 51.25"	58 x 66 x 130	40" x 36" x 79.5"	101 x 91 x 201
ULF601U	626	22	25	4 adjustable (5 compartments)	-40°C to -85°C / -40°F to -121°F	28.5" x 26" x 51.25"	72 x 66 x 130	43" x 37" x 79.5"	109 x 93 x 201
ULF701U	710	25	30	4 adjustable (5 compartments)	-40°C to -85°C / -40°F to -121°F	34" x 25" x 51.25"	86 x 63 x 130	50" x 37" x 79.5"	127 x 93 x 201
ULF801U	792	28	30	4 adjustable (5 compartments)	-40°C to -80°C / -40°F to -112°F	38" x 25" x 51.25"	96 x 63 x 130	54" x 37" x 79.5"	137 x 93 x 201
ULF901U	877	31	35	4 fixed (5 compartments)	-40°C to -80°C / -40°F to -112°F	42" x 25" x 51.25"	106 x 63 x 130	60.5" x 37" x 79.5""	153 x 93 x 201









# 2 ULF SERIES UNDERCOUNTER MINI-CHEST ULTRA LOW FREEZERS

# ■ Common Specifications

Temperature range	-40°C to -85°C / -76°F to -121°F
Temperature control system	Digital data logging. Battery back-up, Hi/Low alarm.
Clearance	4" on sides and back.
Alarm system	Battery operated alarm system will emit an audible and visual signal when there is a mechanical or electrical failure. A relay for a remote alarm hook-up is also provided
Doors	Single solid, locking
Legs	Four, leveling
Evaporator	Cold wall
Defrost	Manual
Insulaton	Polyurethane CFC Free.
Electrical requirements	115V, 60 Hz, 1 phase
Supply plug	NEMA 5-15P ETL listed

# ■ Unique Specifications for UNDERCOUNTER Ultra Low Freezers

Model	Capacity		Internal Dimension		External Dimension		
	Liters Cu. ft.		Inch	Centimeter	Inch	Centimeter	
ULF001UN	7	.25	5.75" x 5.5" x 12"	15 x 14 x 31	15.75" x 25" x 26.25"	40 x 60 x 66	
ULF101UN	54	2	14" x 18" x 12.5"	35 x 45 x 31	23" x 27" x 32"	58 x 68 x 81	
ULF201UN	94	3	14" x 19.25" x 20.75"	36 x 49 x 53	37.5" x 28.5" x 32"	95.25 x 72 x 81	





54L ULF101UN



**94L** ULF201UN