

PREMIUM RANGE FREEZERS

Advanced Features at a Great Value

Premium Freezers are the result of over two decades of design innovations, yielding an efficient refrigeration system proven to perform reliably year after year. Like Innova freezers, Premiums are high-quality, full-featured freezers, with the ability to safely preserve your samples over the long term. The distinction is that Premium Freezers use traditional urethane insulation to achieve and maintain ultra-low temperatures.



Premium freezers offer external dimensions nearly identical to the Innova models and are available in two upright and two chest style models. Shown clockwise starting from back left: U410, U570, C660, and C340.

Capacity & Dimensions

Model No. Style	Catalog No.	Electrical	Capacity		Max. Box Capacity			Dimensions (H x W x D)†		Shipping Weight
			L	Cu. Ft.	2"	3"	4"	External	Internal	
U410 Upright	U9260-0000	120 V, 60 Hz	410	14.5	240	180	120	75.4" x 31.5" x 33.5" 1915 x 80 x 85.2 cm	49.8" x 21.7" x 22.6" 126.5 x 55 x 57.5 cm	623 lbs 283 kg
	U9260-0002	208/230 V, 60 Hz								
	U9260-0001	220/240 V, 50 Hz*								
U570 Upright	U9270-0000	120 V, 60 Hz	570	20	400	300	200	75.8" x 40.4" x 33.5" 192.5 x 102.5 x 85.2 cm	49.8" x 30.1" x 22.6" 126.5 x 76.5 x 57.5 cm	689 lbs 313 kg
	U9270-0002	208/220 V, 60 Hz								
	U9270-0001	230 V, 50 Hz*								
C340 Chest	U9230-0000	120 V, 60 Hz	340	12	260	180	120	42.3" x 52.8" x 33.1" 1075 x 134 x 84 cm	30.0" x 30.0" x 23.2" 76 x 76 x 59 cm	546 lbs 248 kg
	U9230-0001	220/240 V, 50 Hz*								
C660 Chest	U9250-0002	208/230 V, 60 Hz	660	23.3	520	360	240	42.3" x 80.7" x 33.1" 1075 x 205 x 84 cm	30.0" x 57.9" x 23.2" 76 x 147 x 59 cm	722 lbs 328 kg
	U9250-0001	220/240 V, 50 Hz*								

(†) To allow for handles and hinges, add 3.1" (8 cm) to width of upright freezers and 4.3" (11 cm) to the depth of chest freezers. Optional CO₂/LN₂ back-up systems add 3.4" (8.65 cm) to height.

(*) All 50 Hz freezers are supplied with both U.K. and Schuko cord sets.



Upright: Model U410
(Models not shown to scale)



Upright: Model U570



Upright: Model U570

Premium Freezer Specifications*

Construction

Insulation: Polyurethane foam, 5.1", 130 mm thick
Exterior: 18 gauge steel, 1.2 mm thick. Powder coated, scratch and rust resistant
Interior: Top-quality, polished 304L stainless steel
Heated Air Vent with Spring-Assisted Plunger: clears ice build-up and prevents vacuum formation
Air Filter: Front-mounted; easy access by quarter-turn screws
Access Ports: Two pass-through ports, ¾", 20 mm dia.
Casters & Feet: Heavy-duty, lockable casters

Temperature Control System

Range: Programmable, to -86°C, in 1°C increments, even at ambient temperature up to 32°C
Control: Microprocessor-controlled temperature and alarms with non-volatile memory
Display: Large, bright, digital LED characters, ½", 1.3 cm high, mounted at eye level on uprights
Optional Remote Monitoring: Factory-installed RS-485 port with optional BioCommand® SFI software monitors multiple freezers simultaneously
Battery Back-Up: Activates alarms and displays temperature during power outages. Separate on-off switch provided for cleaning/servicing/thawing

Refrigeration

Cascade Refrigeration: Hermetically-sealed two-stage cascade system with adequate capacity to cope in high-ambient conditions
Compressors: Low-noise, heavy-duty & commercially-available
Circulation: Requires just one fan for reduced power consumption and noise
Refrigerants: CFC-free and HCFC-free
Compressor Lubricants: Biodegradable and commercially-available, high-performance, synthetic polyolester oil. Prevents "oil-logging"

Security Features

Unique 4-Digit Password: For temperature setpoint and alarms, prevents unauthorized changes
Lock and Key: For outer doors/lids. Barrel lock is removable
Lockable Security Plate: Protects on-off switch and alarm on/off

Monitoring & Alarms

S.M.A.R.T. Plus™ Diagnostic Software: Built into the control panel, provides fault codes to trace and solve system errors
Remote Alarm Contacts: Provide connection to external user-supplied alarm/monitoring system
Visual Alarms: High/low temperature, power out, system fail, battery low, filter clean and fault analysis. LED lamp for remote control operation
Audible Alarms: High/low temperature, power out and system fail

Upright Model Features

Door Latch: Molded handle with built-in removable lock. Powerful cam-action/reverse cam-action latch provides one-handed operation; pulls door firmly closed and pushes door open. Clicks to indicate proper closure
Compartments and Shelving: Five compartments with four adjustable-height, stainless-steel shelves. Additional shelving available
Inner Doors: Five insulated doors on U410 & U570. Stainless-steel hinges unscrew for defrosting/cleaning
Cabinet & Outer Door: Insulated and fitted with low-temperature seals on outer door

Chest Models Features

Door Latch: Positive, single-handed cam action latch with lock
Sub-Lids: Two insulated panels with stainless steel edging on C340; three on C660

Certifications

CE and UL Certified; and meets European WEEE Directives



Chest: Model C340



Chest: Model C660

ENERGY-EFFICIENT & ECO-FRIENDLY

Energy Savings!

New Brunswick offers the most energy-efficient freezers in the industry, reducing power consumption by thousands of kilowatt hours over our competition. Net effect:

- An average savings of 45% in yearly operating costs
- Approximately \$4,000 savings over the life of the freezer
- 33-ton reduction of CO₂ emissions on average, over the life of the freezer (based on 1.55 lbs CO₂/kWh).

Power Features, Advantages & Plugs

Internal Voltage Stabilizer (60 Hz Innova Models excluding U101 & U360): Evens out high and low voltage fluctuations and optimizes energy usage. Optional external unit available for Premiums and Innova U101; slide-in stabilizer optional for Innova U360

Automatic Reset: Protects the microprocessor controller from failure caused by power spikes

Automatic Restart with Non-Volatile Memory: Returns alarms and setpoints to user-programmed levels after power interrupt

Programmed Restart: Random startup, 1- 1.5 minutes apart. Prevents power overload

Freezers with this Code	Have this Plug	Require this Receptacle	NEMA Reference	
			Plug	Receptacle
A			5-15P	5-15
B			5-20P	5-20
C			6-15P	6-15
I N T E R N A T I O N A L				
D			European (Schuko)	
E			UK Model	

Power Consumption*

Brand	Model	Voltage	Amps	Plug Provided	Power Consumption		Pull-Down Time /Hrs.
					Watts	kWh/Day	
Innova	U101	120V, 60 Hz	13	A	265	6.3	3.5
		220/240V, 50 Hz	5	D/E	367	8.8	3.7
	U360	120V, 60 Hz ◊	16.5	B	487	11.6	5.0
		220/240V, 50 Hz	6.5	D/E	492	11.8	5.6
	U535	120V, 60 Hz ◊	16.5	B	550	13.2	5.3
		208/240V, 60 Hz	9	C			
	U725	220/240V, 50 Hz	208/230V, 60 Hz	10	C	685	16.4
220/240V, 50 Hz			9.5	D/E	660	15.8	5.6
C585	208/230V, 60 Hz	120V, 60 Hz ◊	16.5	B	580	13.9	4.3
		220/240V, 50 Hz	9	C	580	13.9	4.3
	220/240V, 50 Hz	5.5	D/E	565	13.5	4.5	
C760	220/240V, 50 Hz	208/230V, 60 Hz	10	C	698	16.7	5.8
		220/240V, 50 Hz	9.5	D/E	665	15.9	5.8
Premium	U410	120V, 60 Hz ◊	16.5	B	540	12.9	4.1
		208/230V, 60 Hz	8	C	540	12.9	4.1
		220/240V, 50 Hz	5	D/E	525	12.6	5.3
	U570	120V, 60 Hz ◊	16.5	B	590	14.1	5.3
		208/220V, 60 Hz	9	C	590	14.1	5.3
		230V, 50 Hz	6	D/E	565	13.5	5.2
	C340	220/240V, 50 Hz	120V, 60 Hz ◊	16.5	B	430	10.3
220/240V, 50 Hz			4.5	D/E	420	10.0	3.8
C660	220/240V, 50 Hz	208/230V, 60 Hz	8	C	625	15.0	6.0
		220/240V, 50 Hz	6	D/E	595	14.2	5.8

(*) All models use single phase power. Amperage shown designates "running" amps.
 (◊) 120 V freezers with this designation require a dedicated 20 Amp line to cover the amps drawn at start-up.

Power Consumption is based on an empty freezer set to -80°C, ambient temperature 20°C - 25°C. Test run over a 24 hr period at rated electrical supply.

Pull Down is based on an empty freezer at ambient temperature of 20- 25°C.

Accessory Racking - Capacities & Catalog Numbers

Freezer Brand	Freezer Model	Cu. Ft.	Compartments Per Freezer	Racks Per Shelf	Racks Per Freezer	Box Size*	Boxes Per Rack	Boxes Per Freezer	Vials Per Freezer†	Rack Catalog No.
Innova	U101	3.6	2	3	6	2" / 50 mm	10	60	6,000	K0641-3003
	U360	12.7	3	3	9	2" / 50 mm	28	252	25,200	K0641-3000
	U535	18.9	3	4	12	2" / 50 mm	28	336	33,600	K0641-3000
	U725	25.6	3	6	18	2" / 50 mm	28	504	50,400	K0641-3000
	C585	20.7	NA	NA	32 †	2" / 50 mm	13	416	41,600	K0641-1690
	C760	26.9	NA	NA	44 †	2" / 50 mm	13	572	57,200	K0641-1690
Premium	U410	14.5	5	3	15	2" / 50 mm	16	240	24,000	K0641-1900
	U570	20.0	5	5	25	2" / 50 mm	28	400	40,000	K0641-1900
	C340	12.0	NA	NA	20 †	2" / 50 mm	16	260	26,000	K0641-1690
	C660	23.3	NA	NA	40 †	2" / 50 mm	13	520	52,000	K0641-1690