

# R. Daniel M. S. C. S. C. C.

86 ULTRA-LOW TEMPERATURE FREEZER



NU-99728



The **Blizzard™ Ultralow Freezer** from NuAire is a -86°C Ultralow Freezer offering core standard features and reliable performance for the storage of storage of cancer cells, stem cells, cord blood, T-cells, organ/tissue and other samples.

#### **Features**

- [1] Vacuum Insulated Panel (VIP) technology is a closed-cell foam that is injected evenly into the exterior walls and door of the freezer. The VIP insulation compact structure permits for more usage storage space while reducing moisture accumulation that leads to icing.
- [2] Easy Open and Close "Claw" like Door Handle with padlock compatibility requires minimal effort to use and produces an air tight seal minimizing frost built up.
- [3] Four Inner Insulated Doors with Double Gasket Seals\* with "claw" like Door Handle creates a tight seal against the inner door gasket and freezer door frame reducing thermal intrusion. Individual doors improve temperature uniformity allowing for rapid recovery of the chamber set point while lowering energy usage.
- [4] The Insulated Outer Door features a Multi-point Gasket System creating a tight seal against the freezer door frame protecting against thermal intrusion reducing frost built up.
- [5] Cascade Refrigeration System features an ultra-low noise dual compressor configuration to efficiently circulate high and low stage refrigerants creating a more consistent storage environment. The efficient heat exchange between high and low stage circuits improves efficiency eliminating compressor stress.
- [6] The Pressure Equalization Port is heated with a spring assisted mechanism to prevent icing allowing the freezer door to be opened shortly after adding samples.
- [7] Circular-chart Temperature Recorder (optional) mounts easily in perengineered mounting space.
- [8] Integrated, microprocessor-based control system, and LED display include comprehensive set point, alarm, monitoring, diagnostic and communications functions.
- [9] Automatic Voltage Compensation System detects and adjusts for variances in line voltage protecting the dual compressor system producing reliable storage conditions.
- [10] A USB Port is easily accessible under the control panel to download historical events such as temperature.
- [11] Four Shelf Locations, Three Adjustable, feature double reinforced shelf brackets to support heavier storage items.
- [12] Remote Alarm Contacts, optional communication port available.
- [13] High impact, recessed Casters and Leveling Feet.

\*Not featured on model NU-99388 and NU-99420

### **Control System**

The eye-level, microprocessor based Blizzard™ Electronic Control System (ECS) provides the simple and safe operation of the storage environment. The Blizzard™ ECS offerings working condition notifications, alarm notification with silence key as well as voltage and ambient temperature displays. The interior temperature is easily programmable and displayed within the center of the control panel. The ECS comes standard with a temperature recorder. Temperature data is easily downloaded via USB from the USB port underneath the control center.



## Capacity

ULT Model	Rack Model	Rack Configuration	Rack Capacity	# of 5 cm (2") 2 ml Fiberboard Boxes in Racks	# of 2 ml Sample Vials, 5 cm (2") Box, 100 Cell Dividers
NU-99338	DCJ-44B	4 Row / 4 Column	6	96	9,600
NU-99486	DCJ-54-B	5 Row / 4 Column	16	320	32,000
NU-99578	DCJ-55-B	5 Row / 5 Column	16	400	40,000
NU-99728	DCJ-55-B	5 Row / 5 Column	20	500	50,000
NU-99828	DCJ-55B	5 Row / 5 Column	24	600	60,000
NU-99420	DCJ-10-A	10 Row / 1 Column	27	270	27,000

# **Specifications**

Model	Configuration	Interior Volume	Interior Dimensions (W x D x H)	Exterior Dimensions (W x D x H)	Temperature Range	Net Weight	Electrical Configuration*
NU-99338	Upright	11.9 ft³ [388 L]	18 <sup>3</sup> / <sub>10</sub> x 24 <sup>4</sup> / <sub>5</sub> x 45 <sup>9</sup> / <sub>10</sub> in [465 x 630 x 1165 mm]	32 x 35 1/ <sub>5</sub> x 72 <sup>7</sup> / <sub>10</sub> in [812 x 893 x 1846 mm]	-40°C to -86°C	<b>525 lbs</b> [238 kg]	GA: 115V / 60Hz G: 220V / 60Hz E: 230V / 50 Hz
NU-99486	Upright	17.1 ft <sup>3</sup> [486 L]	23 3/ <sub>10</sub> x 24 4/ <sub>5</sub> x 51 3/ <sub>5</sub> in [590 x 630 x 1310 mm]	37 1/ <sub>5</sub> x 35 2/ <sub>5</sub> x 78 in [945 x 900 x 1980 mm]		639 lbs [290 kg]	GA: 115V / 60Hz G: 220V / 60Hz E: 230V / 50 Hz
NU-99578	Upright	20.4 ft <sup>3</sup> [578 L]	24 2/ <sub>5</sub> x 28 1/ <sub>5</sub> x 51 3/ <sub>5</sub> in [620 x 716 x 1310 mm]	35 2/ <sub>5</sub> x 38 3/ <sub>5</sub> x 78 in [895 x 980 x 1980 mm]		<b>661 lbs</b> [300 kg]	GA: 115V / 60Hz G: 220V / 60Hz E: 230V / 50 Hz
NU-99728	Upright	<b>25.7</b> ft <sup>3</sup> [728 L]	27 x 28 <sup>1</sup> / <sub>5</sub> x 51 <sup>3</sup> / <sub>5</sub> in [766 x 716 x 1310 mm]	36 7/ <sub>10</sub> x 38 3/ <sub>5</sub> x 78 in [1041 x 980 x 1980 mm]		<b>761 lbs</b> [345 kg]	GA: 115V / 60Hz G: 220V / 60Hz E: 230V / 50 Hz
NU-99828	Upright	<b>29.2</b> ft <sup>3</sup> [828 L]	34 3/ <sub>10</sub> x 28 1/ <sub>5</sub> x 51 3/ <sub>5</sub> in [870 x 716 x 1310 mm]	45 1/ <sub>10</sub> x 38 3/ <sub>5</sub> x 78 in [1145 x 980 x 1980 mm]		838 lbs [380 kg]	G: 220V / 60Hz E: 230V / 50 Hz
NU-99420	Chest	14.8 ft <sup>3</sup> [420 L]	53 4/ <sub>5</sub> x 18 1/ <sub>5</sub> x 25 7/ <sub>10</sub> in [1367 x 462 x 652 mm]	83 9/ <sub>10</sub> x 34 3/ <sub>10</sub> x 40 1/ <sub>5</sub> in [2130 x 870 x 1020 mm]		<b>357 lbs</b> [310 kg]	G: 220V / 60Hz E: 230V / 50 Hz

### **Features**

#### **Standard Features**

Balanced cascade refrigeration system Microprocessor control system USB data logging port RS 485 contract point RS 232 contact point Ambient temperature display Multi-check alarm system w/ ring back Self check diagnostic system Line voltage display

Auto line voltage compensation

Compressor delay protection

Low voltage booster

High voltage protection

Noise level ≤ 50dba

Vacuum insulated non-CFC

polyurethane foam insulation

4 inner shelves (3 adjustable/1 fixed)

4 insulated sealed inner doors w/ claw

latch (NU-99486, NU-99578, NU-99728, NU-99728)

2 insulated sealed inner doors w/ claw latch (NU-99388)
Multi-point gasket system
Heavy duty outer door claw latch
External door lock
Pressure equalization port
Battery backup (Up to 72 hour life)
2 Accessory Ports (Back Wall, Top and Bottom)
Quantity 4 Casters

#### **Options/Accessories**

Inventory Freezer Racks for 2-inch (5 cm) boxes CO2 Backup system LN2 Back up system Temperature Recorder











Quantity 4 Leg Leveling Feet

Defrost scraper (Qty 1)

WARRANTY