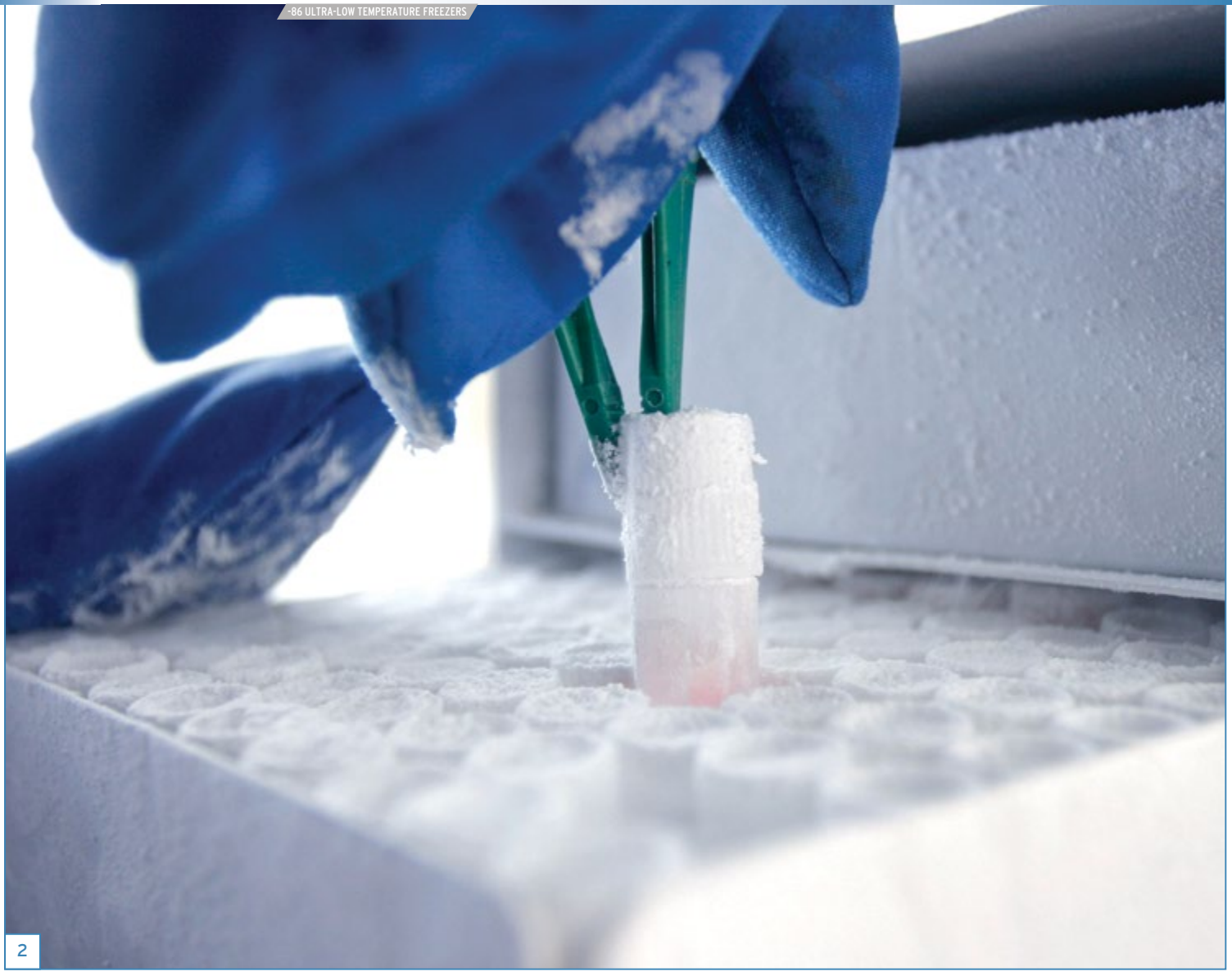
BLIZZARD

ULTRA-LOW TEMPERATURE FREEZERS



NUAIRE

NuAire, Inc. | 2100 Fernbrook Lane | Plymouth, MN 55447 | U.S.A. | nuaire.com



-86°C Upright Ultralow Freezer



NU-99728
Ultralow Temperature Freezer

Blizzard Ultralow Temperature Freezers provide stable storage conditions for your samples and offer advanced features at an affordable price. Vacuum insulated panels surround the storage chamber to provide greater temperature uniformity and maximize storage space. A dual compressor system dependably maintains consistent storage conditions. Blizzard Ultralow Temperature Freezers are the safer choice for your storage needs.

Model	Configuration	Interior Volume
NU-99338	Upright	338 L / 11.9 ft^3
NU-99486	Upright	486 L / 17.1 ft^3
NU-99578	Upright	578 L / 20.4 ft^3
NU-99728	Upright	728 L / 25.7 ft^3
NU-99828	Upright	828 L / 29.2 ft^3
NU-99420	Chest	420 L / 14.8 ft^3

Power Factor Control
Monitors, compensates, and protects against facility line voltage variations.

Four Internal Shelf Locations (Three Adjustable / One Stationary)
Provides flexibility in rack configurations.

HFC Refrigerants
Commercially available HFC refrigerants are efficient, environmentally safe, and non-ozone depleting.

Vacuum Insulated Panels (VIP)
Surround the storage chamber offering increased temperature stability and maximizing interior volume.

Remote Alarm Contacts
RS 232 and RS 485 provide connection ports for popular monitoring systems.

Battery Backup
Powers the freezer in the event of an interruption in the primary power source.

Front Filter Access
Allows convenient access for regular maintenance to the washable condenser filter.



NU-99728
Ultralow Temperature Freezer


[A]


[B]


[E]


[F]

Outer Door Claw Latch [A]

Maintains a tight seal to minimize frost built-up, yet requires minimal effort to open the freezer door.

Removable Insulated Inner Doors [B]

Gasket sealed inner doors allow access to selected samples while preventing frost build-up and thermal intrusion in other parts of the interior.

Pressure Equalization Port [E]

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.

Sample Ports [F]

Two sample ports are located on the back top and bottom of the freezer to allow convenient access for monitoring tools.


[C]


[D]


[G]

Multi-point Gasket System [C]

Four gaskets located on the outer door and one gasket on each inner door protects against thermal intrusion.

A USB Port [D]

Easily accessible from the front of the freezer to download data.

Circular Chart Recorder [G]

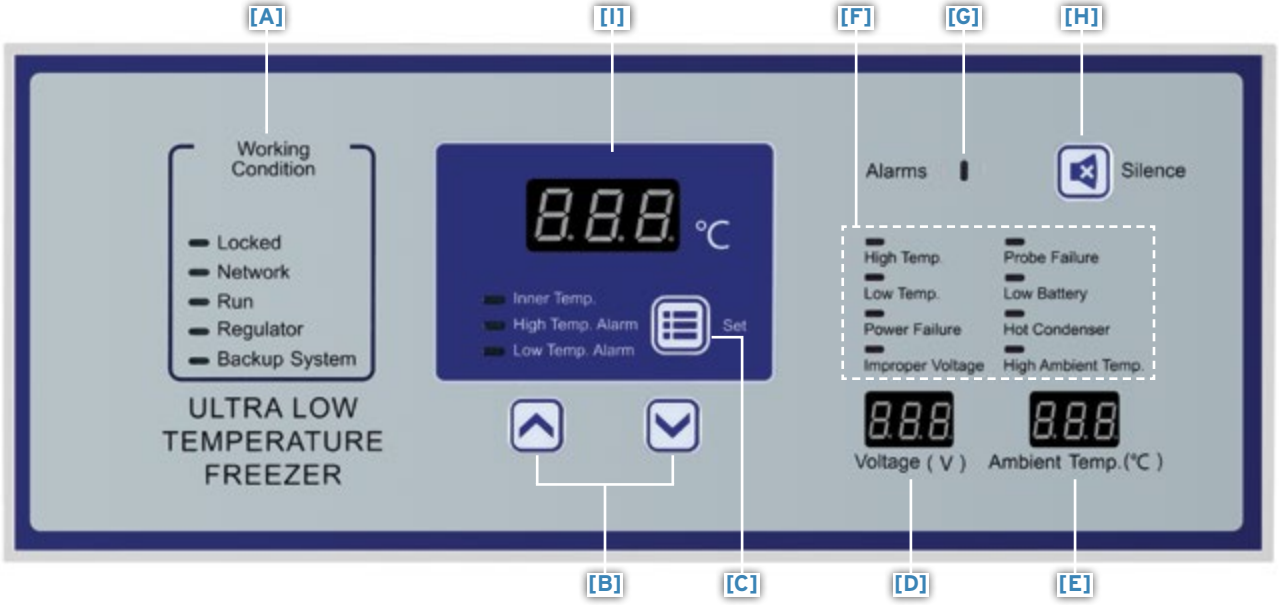
A circular chart recorder (optional) can be front-mounted for independent temperature recording and monitoring.

Blizzard Electronic Control System

Simplicity at its finest. The Blizzard Electronic Control System offers a centrally located control panel at eye level providing essential elements of control and monitoring.

Status Display [A]
Adjustment Keys [B]
Function Selection [C]
Voltage Display [D]
Ambient Temperature [E]
Alarm Notifications [F]
Alarm Volume [G]
Silence Key [H]

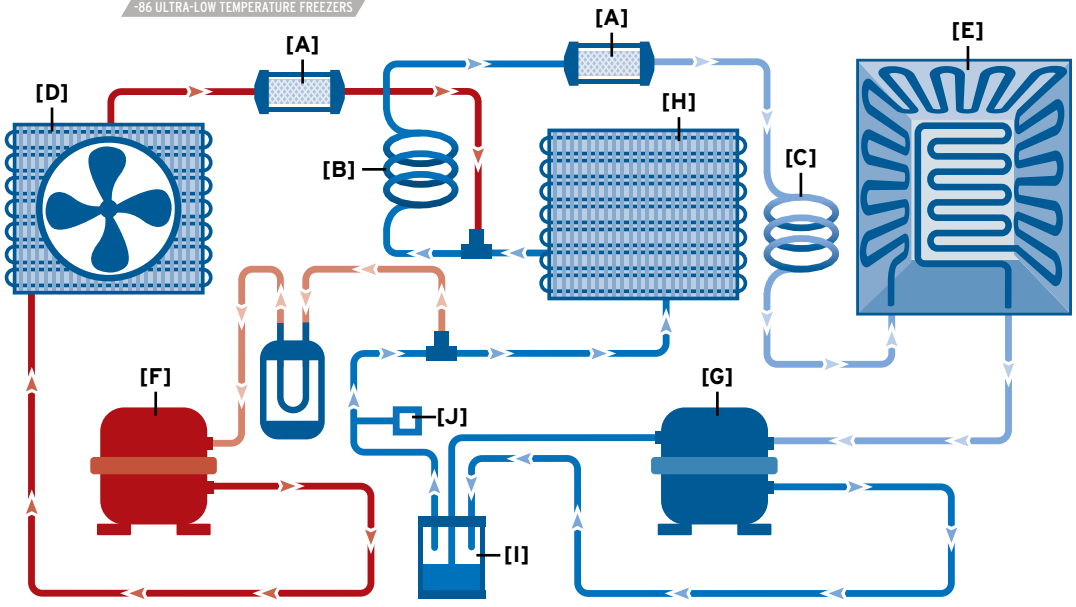
Display [I]
Displays current interior temperature, high temperature alarm, low temperature alarm, password settings, and error codes.



Alarms

The Blizzard Electronic Control System comes standard with monitoring and alarm systems designed to protect your samples with visible and audible notifications.

Alarm	Event
High Temperature	Internal Temperature High
Low Temperature	Internal Temperature Low
Power Failure	Loss of Power
Door Ajar	Door Opening Exceeds Setpoint (Adjustable 0 to 20 Minutes)
Sensor Error	E0 - Ambient sensor failure E1 - Condenser sensor failure E2 - Temperature control sensor failure E3 - Heat exchanger sensor failure E4 - Heat exchanger temperature failure
Low Battery	Internal Battery is Close to End of Life Battery Switch is Not Turned On
Hot Condenser	Condenser Filter Blocked High Ambient Temperature
High Ambient Temperature	Ambient Temperature Exceeds 32°C



A dual compressor refrigeration system offers an enhanced heat exchange system to maintain optimal storage conditions and rapidly cool down the storage area after door openings.

[A] Filter Dryer
Separates contaminants, such as water, from refrigerant.

[B] Capillary Tube for High Stage
High temperature refrigerants flow into the evaporator from the capillary tube.

[C] Capillary Tube for Low Stage
Low temperature refrigerants flow into the evaporator from the capillary tube.

[D] High Stage Condenser
Extra large air-cooled condenser dissipates heat efficiently.

[E] Low Stage Evaporator
Close contact design between the evaporating tube and the inner cabinet increases heat conducting efficiency.

[F] Ultra low-noise High Stage Compressor

[G] Ultra low-noise Low Stage Compressor
- Reliable, ultra-low noise, compressor.
- Low stage evaporator yields excellent temperature uniformity and recovery after loading and door opening.
- Both high and low stage compressors are industrial grade hermetically sealed, and designed for low temperature applications. Extremely low sound level.

[H] Heat Exchanger System
Heat exchanger between high and low temperature stages

[I] Temp-rite Oil Separator
Temp-rite Oil Separator can effectively separate oil and water to improve refrigeration performance.

[J] Pressure Switch

Accessories

Part Number	Accessories / Options
HAI-960	Chart Recorder 7 day, 6" Circular - Factory Install
HAI-219	Chart Recorder Replacement Paper (52 Charts)
HAI-UB2I	CO_2 Back-Up Kit - Field Install
HAI-UBN2	LN_2 Back-UP Kit - Field Install
HAI-6936	Cryo Cloves (72mm)

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-55-B	5 Row / 5 Column	24	600	60,000
NU-99420	DCJ-10-A	10 Row / 1 Column	27	270	27,000

*Specify model with appropriate letter suffix for electrical specification "NU-99578G" for 220V / 60Hz

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	338 L 11.9 ft^3	465 x 630 x 1165 mm 18.3 x 24.8 x 45.9 in	812 x 893 x 1846 mm 32 x 35.2 x 72.7 in	-40°C to -86°C	238 kg 525 lbs	GA: 115V / 60 Hz G: 220V / 60 Hz E: 230V / 50 Hz
NU-99486	Upright	486 L 17.1 ft^3	590 x 630 x 1310 mm 23.3 x 24.8 x 51.6 in	945 x 900 x 1980 mm 37.2 x 35.4 x 78 in		290 kg 639 lbs	GA: 115V / 60 Hz G: 220V / 60 Hz E: 230V / 50 Hz
NU-99578	Upright	578 L 20.4 ft^3	620 x 716 x 1310 mm 24.4 x 28.2 x 51.6 in	895 x 980 x 1980 mm 35.4 x 38.6 x 78 in		300 kg 661 lbs	GA: 115V / 60 Hz G: 220V / 60 Hz E: 230V / 50 Hz
NU-99728	Upright	728 L 25.7 ft^3	766 x 716 x 1310 mm 27 x 28.2 x 51.6 in	1041 x 980 x 1980 mm 36.7 x 38.6 x 78 in		345 kg 761 lbs	GA: 115V / 60 Hz G: 220V / 60 Hz E: 230V / 50 Hz
NU-99828	Upright	828 L 29.2 ft^3	870 x 716 x 1310 mm 34.3 x 28.2 x 51.6 in	1145 x 980 x 1980 mm 45.1 x 38.6 x 78 in		380 kg 838 lbs	G: 220V / 60 Hz E: 230V / 50 Hz
NU-99420	Chest	420 L 14.8 ft^3	1367 x 462 x 652 mm 53.8 x 18.2 x 25.7 in	2130 x 870 x 1020 mm 83.9 x 34.3 x 40.2 in		310 kg 357 lbs	G: 220V / 60 Hz E: 230V / 50 Hz

*Specify model with appropriate letter suffix for electrical specification "NU-99578G" for 220V / 60Hz

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-99828)
- 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)
- Accessory port back wall (25.8 mm diameter)
- Quantity 4 Casters
- Quantity 4 Leg Leveling Feet
- Defrost scraper (Qty 1)

Options / Accessories

- Freezer Racks for 5 cm (2 in) Boxes
- CO_2 Backup system
- LN_2 Backup system
- Temperature Recorder

non CFC REFRIGERANTS · UL · CE · 4 YEAR WARRANTY PARTS Worldwide



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