# Innovation | Technology | Precision





Newtronic Lifecare Equipment Pvt. Ltd. www.newtronic.in





### Welcome to the world of

### **NEWTRONIC:** The name you can trust

- Established in 1980 Manufacturing facility of over 60,000 sq. ft. Globally available superior quality components PLC-based intelligent controlling systems
- Web-based software to access the chambers from anywhere, anytime

- Installation of more than 10,000 Chambers
  Large-sized chambers of upto 1 Million Litre capacity
  Execution of a single order of Walk-In Stability Chambers
  worth (₹.100) Million (USD \$1.7 Million)

# **Innovation | Technology | Precision**

# .... our key to excellence

For over 44 years now, NEWTRONIC LIFECARE has established itself as one of the leading brands in the space of Laboratory Equipments. Through a setup of task-specific departments, inter-department synergy & adherence to processes, we ensure a professionally managed environment for our employees & customers. We understand very clearly that the backbone of a successful customer relationship is an after-sales support that responds quickly & efficiently. We have therefore established service centers in all the major pharma hubs & states of India Over 49 countries internationally.



### STABILITY CHAMBERS | CUSTOM DESIGN & VALIDATION

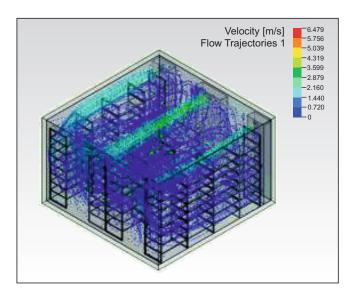
### **Specialized Design to meet Specific Needs**



### Fine Interior with specialised key features

- Complete Stability Solutions
- One-stop supplier for stability chambers
- Chambers built to last longer and to meet all requirements-now and in future.
- Chambers from 200 liters to 2,50,000 liters as well as customised ones

### **Determination of Uniformity**



- Air Flow Stimulation Software
- Ensures uniformity of the conditions
- Determines an accurate air-path
- Determines the Hot & Cold Zones; Dry & Humid Zones
- Facilitates a proper sample loading pattern

### **Application**

Newtronic chambers are suitable to meet the regulatory requirements of the various international bodies such as (ICH, USFDA, MHRA, WHO, EU-GMP, TGA, JPMMA, ANVISA, ASEAN) or any of the other National Testing Standards.

### The ICH Q1A(R2) & Q1B conditions for different application are as follows:

| Application                                     | Study          | Conditions  | Study Point |
|---|----------------|---|-------------|
| General Conditions                              | Long Term*     | 25°C ± 2°C / 60% RH ± 5% RH<br>30°C ± 2°C / 65% RH ± 5% RH<br>30°C ± 2°C / 75% RH ± 5% RH | 12 months   |
|   | Accelerated    | 40°C ± 2°C / 75% RH ± 5% RH   | 06 months   |
| Drug Products packed in Semi-permeable          | Long Term*     | 25°C ± 2°C / 40% RH ± 5% RH<br>30°C ± 2°C / 35% RH ± 5% RH                                | 12 months   |
| container                                       | Intermediate   | $30^{\circ}\text{C} \pm 2^{\circ}\text{C} / 65\% \text{ RH} \pm 5\% \text{ RH}$           | 06 months   |
|   | Accelerated    | 40°C ± 2°C / NMT 25% RH   | 06 months   |
| Drug Products for                               | Long Term*     | 5°C ± 3°C   | 12 months   |
| storage in Refrigerator                         | Accelerated    | 25°C ± 2°C / 60% RH ± 5% RH   | 06 months   |
| Drug Products intended for storage in a Freezer | Long Term*     | -20°C ± 5°C   | 12 months   |
| MVTR -  |                | 23°C / 75% RH   |             |
| Moisture Vapor                                  | -              | 25°C / 80% RH   |             |
| Transmission Rate                               |                |   |             |
| ICH   |                | Exposure to Light intensity of 1.2 million  |             |
| Q1 B  | Photostability | Lux Hours & UV Light intensity of   |             |
|   |                | 200 watt / sq. mtr.   |             |

 $<sup>^{\</sup>star}$  If 30°C / 65% RH or 30°C / 35% RH is the long-term then there is no intermediate.

### Features | Functions | Flexibility



#### **Ethernet Communication:**

- High-speed data transfer
- Global standard for communication protocol
- Data Operations from any PC over the LAN



#### 2nd Generation I-Series Controllers No Data Loss:

- Data Storage of 1000 reading on the PLC itself
- At an interval of 30 mins, data upto 20 days is stored on the PLC itself.



### **Touch Screen Display**

- All operations through a 7" Color touch screen display
- PLC IP Address setting
- Component Working Hours
- Stand by system change over
- Password protection for set values and calibration mode
- User manual, Troubleshooting and Preventive Maintenance procedure
- Alarms recordings



#### **Touch Screen Door Access System**

- Both Password-based and Biometric based access control
- Restricts access to unauthorized persons



#### **Humidity System**

- Non-condending Steam injection ( Reach -Ins & small capacity Walk-Ins)
- Principles of Dew Point Control (Walk-Ins)



### **Standby Humidity & Cooling Systems**

- Completely ready-to-use system
- Automatic switch-over upon failure of primary system
- Switch-over also upon detection of HP/LP & Internal faults
- Scheduled & manual change-overs
- Booster Cooling for faster recovery
- Recording of all change overs in the software



### **Complete Range of Alarms**

- Temperature & Humidity Deviations
- Door Opening
- Water Supply Failure
- Component Failure
- Mains Failure



#### **Alarm Transmissions**

- To Software
- To Remote Location ( such as Security Gate)
- Through detailed SMS Notification
- Locally at equipment ( audio-visual indication & on the display)











#### Mobile Alert System

- Time of Alarm transmission
- Name of Equipment
- Transmitted Message ( Equiipment Name, Alarm time, Type of Alarm & Limits.)



#### Safety

- Temperature Overshoot/Undershoot
- Low water-level
- Delay Timer to safeguard the Compreswsor
- MCB to cut-off over-current supply
- Standby Controlling Sensor upon failure of Primary
- In Walk-in chambers door can be opened from inside
- Emergency Bell switch inside the chamber



#### **Multiple Sensors**

- Either 4 or 8 probes can be placed
- Helps study the distribution in the different location of the chamber
- Works as an auto-validation system
- Easy detection of drift in the sensors
- Helps determine the variation in conditions by changes in sample - loading pattern



### **Documentation & Training**

- DQ, IQ, OQ, PQ, & SOP & Maintenance Manuals
- Calibration Certificates
- GA & Electrical Drawings
- Material test Certificates
- Training to end-users



### **Audit Support**

- Quick Resolution to NCs
- Justification to Excursion
- On-site Support
- Remote Support via Team Viewer
- Documenattion

Temperature Range: 20°C to 60°C Humidity Range: 40% Rh to 95% Rh

# **Stability Chambers**



- Double walled with PUF insulation.
- SS 304 Interior & Exterior either SS 304 or Mild Steel
- Stainless Steel trays
- Full-length inner glass door & metal door with gasket & lock on the outside
- Internal LED lights
- Forced air circulation for uniform temperature
- PU wheels for easy movement
- U-shaped SS tubular heaters
- Non condensing steam injection type humidity system with standby heater & auto switch overs
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- Stand by humidity system with booster humidification
- Complete Operations driven through PLC with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen
- High quality imported make T/Rh combo sensor with 4-20 mA output
- Safety devices: Low & high temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual

**Power supply:** 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.

# **SPECIFICATIONS**

Temperature Range : 20°C to 60°C Temperature Accuracy : ± 0.5°C Temperature Uniformity :  $\pm 1$ °C

**Humidity Range** : 40% Rh to 95% Rh

**Humidity Accuracy** : ± 2% Rh **Humidity Uniformity** : ± 3% Rh

#### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- 4 pt. Temperature & Humidity Scanner
- Stand by Cooling System with auto switch over (430 litre & above)
- Door Access system (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

#### **Selection Guide**

| Model    | Capacity    |      | Capacity          |                    | Internal Size | External Size | Trays<br>Qty. | Trays Size | Approx. W | /eight (Kg) |
|----------|-------------|------|-------------------|--------------------|---------------|---------------|---------------|------------|-----------|-------------|
|          | CuFt. Liter |      | (H*W*D) mm        | (H*W*D) mm         |               | (W*D) mm      | Eqip.         | Ship.      |           |             |
| NLHC7SI  | 7           | 200  | 800 X 500 X 500   | 1315 x 660 x 985   | 3             | 430 X 460     | 150           | 225        |           |             |
| NLHC16SI | 16          | 430  | 1200 X 600 X 600  | 1715 x 760 x 1155  | 4             | 530 X 560     | 250           | 325        |           |             |
| NLHC26SI | 26          | 735  | 1500 X 700 X 700  | 2070 x 860 x 1255  | 5             | 630 X 660     | 275           | 350        |           |             |
| NLHC34SI | 34          | 1000 | 1500 X 800 X 800  | 2070 x 960 x 1355  | 5             | 730 X 760     | 350           | 425        |           |             |
| NLHC54SI | 54          | 1500 | 1500 X 1600 X 600 | 2070 x 1760 x 1155 | 10            | 695 X 560     | 350           | 450        |           |             |
| NLHC71SI | 71          | 2000 | 1500 X 1600 X 800 | 2070 x 1760 x 1355 | 10            | 695 X 760     | 375           | 475        |           |             |

### Also available in PELTIER TECHNOLOGY

\* Newtronic reserve the rights to change the product specifications without prior notice

























Documents

Temperature Range: 10°C to 40°C

### **Photo Stability Chambers**



### Small, Efficient, Sufficient



### **Standard Equipment**

- Double walled with PUF insulation
- SS 304 Interior & Exterior either SS 304 or Mild Steel. Additionally Interior walls are flushed with mirrors
- Stainless Steel trays
- > Full-length inner glass door, metal door with gasket & lock on the outside.
- Forced air circulation for uniform temperature
- > PU wheels for easy movement
- Fluorescent LED light fitted on the top of the inner chamber to provide illumination & produce visible light measured in lux
- UV light of wavelength 365nm (measured in watt/sq. m.) fitted on top of the chamber
- U-shaped SS tubular heaters.
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser.
- Complete Operations driven through PLC with data logging capacity of upto 1000 readings
- High speed Ethernet based communication.
- All operations through a single 7" Color Touch Screen.
- High-quality PT-100 Temperature sensor.
- Safety devices: Low & high temperature cut-off settable thermostats.
- > Safety thermostat switches off the lights upon temperature overshoot.
- Automatic switch off of UV lights upon door opening.
- Audio/Visual alarms for deviations.
- Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual

**Power supply:** 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.

\*Also available: Photostability Chambers with Humidity control

#### **SPECIFICATIONS**

Temperature Range : 10°C to 40°C
 Temperature Accuracy : ± 0.5°C
 Temperature Uniformity : ± 1°C

### **Optional Accessories**

- ▶ ICDAS -A Single Software installation for all Newtronic make equipments
- LUX and UV meter
  - Hand held OR
  - Real-time measurement by inbuilt sensor
- Door Access System (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipment
- Mobile Alert System

#### Selection Guide

| Model     | Capacity |       | Internal Size   | External Size     | Trays<br>Qty. | Trays Size | Approx. W | /eight (Kg) |
|-----------|----------|-------|-----------------|-------------------|---------------|------------|-----------|-------------|
|           | CuFt.    | Liter | (H*W*D) mm      | (H*W*D) mm        |               | (W*D) mm   | Eqip.     | Ship.       |
| NLPS4SI   | 4        | 100   | 450 X 450 X 480 | 925 X 700 X 720   | 1             | 410 X 440  | 125       | 220         |
| NLPS8SI   | 8        | 227   | 600 X 630 X 600 | 1410 X 790 X 1055 | 1             | 580 X 560  | 175       | 250         |
| *NLPSH8SI | 8        | 227   | 600 X 630 X 600 | 1410 X 790 X 1075 | 1             | 580 X 560  | 185       | 260         |

\* Newtronic reserve the rights to change the product specifications without prior notice



Ethernet

















Temperature Range: 20°C to 60°C Humidity Range: 40% Rh to 95% Rh

# **Walk-In Stability Chambers**





- Double walled with 60mm PUF insulated modular panels with easy on-site assembly
- SS 304 Interior & Exterior either SS 304 or Pre Coated GI
- Stainless Steel Trays
- Observation window 300 x 300 mm
- PVC strip curtain for reducing temperature leakages
- Illuminated working area
- Flooring of Linoleum carpet
- Heater line along the door to avoid condensation
- U-shaped SS tubular heaters
- Forced air circulation for uniform temperature
- Humidity is primarily controlled through the principles of Dew point control (for capacities>8KL)
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- System is made up of split type condenser unit in well-ventilated area to avoid throw of hot air in the room
- Stand by humidity system with booster humidification
- Complete Operations driven through PLC with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen
- High quality imported make T/Rh combo sensor with 4-20 mA output
- Safety devices: Low & High temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- ► Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual

Power supply: 230/415 volts 50 Hz main supply. Also available with 60 Hz Cycle.

### **SPECIFICATIONS**

Temperature Range : 20°C to 60°C
 Temperature Accuracy : ± 0.5°C
 Temperature Uniformity : ± 1°C

Humidity Range : 40% Rh to 95% Rh

**tronic**System

**Green Mode Energy Optimisation** 

Humidity Accuracy : ± 2% Rh
 Humidity Uniformity : ± 3% Rh

#### **Optional Accessories**

- ► ICDAS -A Single Software installation for all Newtronic make equipments
- ▶ 8 pt. Temperature & Humidity Scanner
- Stand by Cooling System with auto switch over
- Door Access system (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

### Selection Guide

| Model       | Capacity |        | Internal Size      | External Size      | Trays<br>Qty. | Trays Size |
|-------------|----------|--------|--------------------|--------------------|---------------|------------|
|             | CuFt.    | Liter  | (H*W*D) mm         | (H*W*D) mm         |               | (W*D) mm   |
| NLWH208SI   | 208      | 5,848  | 2000 X 1360 X 2150 | 2120 X 1480 X 2270 | 20            | 900 X 300  |
| NLWH250SI   | 250      | 7,017  | 2400 X 1360 X 2150 | 2520 X 1480 X 2270 | 28            | 900 X 300  |
| NLWH307SU   | 307      | 8,600  | 2000 X 2000 X 2150 | 2120 X 2120 X 2270 | 20            | 900 X 600  |
| NLWH368SU1  | 368      | 10,320 | 2400 X 2000 X 2150 | 2520 X 2120 X 2270 | 28            | 900 X 600  |
| NLWH543SU   | 543      | 15,216 | 2400 X 2000 X 3170 | 2520 X 2120 X 3290 | 42            | 900 X 600  |
| NLWH679SU   | 679      | 19,020 | 2400 X 2500 X 3170 | 2520 X 2620 X 3290 | 42            | 900 X 800  |
| NLWH1092SU1 | 1092     | 30,600 | 2400 X 2500 X 5100 | 2520 X 2620 X 5220 | 70            | 900 X 800  |
| NLWH1787SU1 | 1787     | 50,040 | 3000 X 4000 X 4170 | 3120 X 4120 X 4290 | 126           | 900 X 600  |
| NLWH2857SU  | 2857     | 80,019 | 3000 X 5100 X 5230 | 3120 X 5220 X 5350 | 162           | 900 X 800  |

\*Custom Build Chambers also available | \* Models with Exterior powder coated GI sheet & Interior stainless steel (304) will be available on request. Standard Inner Heights: 2.0, 2.4, 3.0 Mt | Standard Inner Width: 1.36, 2.0, 2.5, 4.0 Mt | Standard Inner Depths: 2.0, 3.0, 4.0, 5.0 Mt

\* Newtronic reserve the rights to change the product specifications without prior notice.















Alarms



Mobile Alert



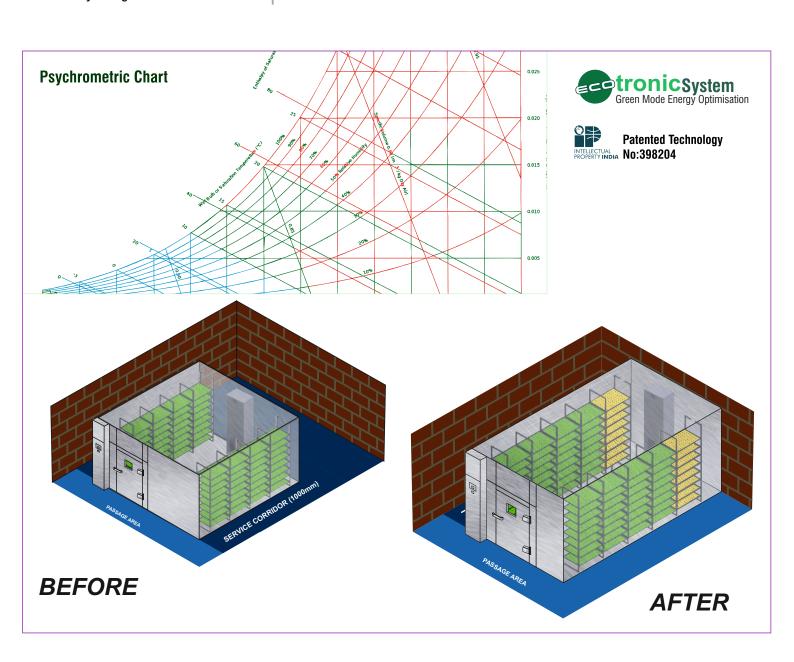






Temperature Range: 20°C to 60°C Humidity Range: 40% Rh to 95% Rh

# **ECOTRONIC Walk-In Stability Chambers**





# Introducing a Patented Technology for Green Mode Energy Optimization



Based on Principles of Dew Point Control



Low Power & Water Consumption



**More Storage Area** 



No short term Deviations



Less Breakdown

### Temperature Range: -20°C to 50°C

Storage conditions must be distributed in a manner that ensures that the product quality will not be adversely affected. With the exception of short transit times within the same climatic zone, it is virtually impossible to validate a shipping method against all environmental conditions.

Therefore, distribution stability studies are designed to generate additional data and to complement preformulation development and routine (ICH Q1A(R2)) studies



### **Freeze Thaw Chambers**

### **Standard Equipment**

- Double walled with PUF insulation
- SS304 Interior & Exterior of Mild Steel
- Stainless Steel trays
- Metal door with gasket & lock on the outside
- Forced air circulation for uniform temperature
- PU wheels for easy movement
- U shaped SS tubular heaters
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- Complete Operations driven through PLC with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen
- High-quality PT-100 Temperature sensor
- Safety devices: High Temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual

Power supply: 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.

### **Mode of Operation**

- User can program a specific profile needed for their application to enable rapid simulation conditions & the need to replicate freezing & thawing during product
- Upto 4 temperatures set point can be set in cyclic mode. (eg. -20°C set for 48 hrs, 5°C for 24 hrs, 25°C for 72 hrs and 40°C for 120 hrs) No. of such temperature cycles can be repeated

#### **SPECIFICATIONS**

Temperature Range : -20°C to 50°C

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- Door Access system (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

### **Selection Guide**

| Model    | Capacity |       | Capacity          |                    | Internal Size | External Size | Trays<br>Qty. | Trays Size | Approx. W | /eight (Kg) |
|----------|----------|-------|-------------------|--------------------|---------------|---------------|---------------|------------|-----------|-------------|
|          | CuFt.    | Liter | (H*W*D) mm        | (H*W*D) mm         |               | (W*D) mm      | Eqip.         | Ship.      |           |             |
| NLFT7MI  | 7        | 200   | 510 X 560 X 700   | 1500 X 720 X 880   | 2             | 540 X 605     | 175           | 250        |           |             |
| NLFT11MI | 11       | 300   | 910 X 560 X 590   | 1955 X 720 X 770   | 3             | 540 X 495     | 225           | 300        |           |             |
| NLFT14MI | 14       | 400   | 910 X 560 X 785   | 1955 X 720 X 965   | 3             | 540 X 690     | 275           | 350        |           |             |
| NLFT25MI | 25       | 700   | 1200 X 800 X 730  | 2120 X 960 X 1020  | 4             | 780 X 635     | 300           | 375        |           |             |
| NLFT34MI | 34       | 1050  | 1200 X 1200 X 730 | 2110 X 1360 X 1020 | 8             | 515 X 635     | 325           | 515        |           |             |
| NLFT54MI | 54       | 1500  | 1200 X 1500 X 830 | 2110 X 1660 X 1120 | 8             | 660 X 735     | 350           | 660        |           |             |

\* Newtronic reserve the rights to change the product specifications without prior notice



















Upper Temperature Range: 2°C to 8°C

Lower Temperature Range: -10°C to -25°C



# **Combo Refrigerator**

### **Standard Equipment**

- Double wall PUF insulation
- Interior SS 304 & Exterior Mild Steel
- Stainless Steel Trays
- Doors with magnetic gasket for all airtight sealing
- Forced air circulation for uniform temperature
- PU Wheels for easy movement
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- Complete operation are driven through IOT-enabled Controller with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen Display
- High-quality PT-100 Temperature sensor
- Safety devices: Low Temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ, SOP & Maintenance Manual

**Power supply:** 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.

### **SPECIFICATIONS**

Upper Temperature Range: 2°C to 8°C

Lower Temperature Range: -10°C to -25°C

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

| Model      | Capacity              |             | Internal Size           | Internal Size External Size |           | Trays Size | Approx. W | eight (Kg) |
|------------|-----------------------|-------------|-------------------------|-----------------------------|-----------|------------|-----------|------------|
|            | CuFt. Liter           |             | (H*W*D) mm              | (H*W*D) mm                  |           | (W*D) mm   | Eqip.     | Ship.      |
| NLCR14MI   | Upper - 7             | Upper - 200 | Upper - 510 X 560 X 700 | 2070 X 720 X 1005           | Upper - 2 | 540 X 605  | 300       | 375        |
| NEGITIANII | Lower - 7 Lower - 200 |             | Lower - 510 X 560 X 700 | 2070 X 720 X 1003           | Lower - 2 |            |           | 373        |







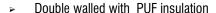






# **Laboratory Refrigerators**





- SS 304 Interior & Exterior either SS 304 or Mild Steel
- Stainless Steel trays
- Full-lenth inner glass door with magnetic gasket
- Forced air circulation for uniform temperature
- PU wheels for easy movement
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- Complete Operations driven through IOT-enabled Controller with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen Display
- High-quality PT-100 Temperature sensor
- Safety devices: Low temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual

**Power supply:** 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.



### **SPECIFICATIONS**

Temperature Range : 2°C to 8°C Temperature Accuracy : ± 0.5°C Temperature Uniformity: ± 1°C

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- 4 pt. Temperature Scanner
- Stand by Cooling System with auto switch over (430 litre & above)
- Door Access System (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

| Model    | Capacity |       | Capacity          |                    | Internal Size | External Size | Trays<br>Qty. | Trays Size | Approx. W | /eight (Kg) |
|----------|----------|-------|-------------------|--------------------|---------------|---------------|---------------|------------|-----------|-------------|
|          | CuFt.    | Liter | (H*W*D) mm        | (H*W*D) mm         |               | (W*D) mm      | Eqip.         | Ship.      |           |             |
| NLCC7SI  | 7        | 200   | 800 X 500 X 500   | 1315 x 660 x 965   | 3             | 430 X 460     | 150           | 225        |           |             |
| NLCC16SI | 16       | 430   | 1200 X 600 X 600  | 1715 x 760 x 1105  | 4             | 530 X 560     | 250           | 325        |           |             |
| NLCC26SI | 26       | 735   | 1500 X 700 X 700  | 2070 x 860 x 1205  | 5             | 630 X 660     | 275           | 350        |           |             |
| NLCC34SI | 34       | 1000  | 1500 X 800 X 800  | 2070 x 960 x 1305  | 5             | 730 X 760     | 350           | 425        |           |             |
| NLCC54SI | 54       | 1500  | 1500 X 1600 X 600 | 2070 x 1760 x 1105 | 10            | 695 X 560     | 350           | 450        |           |             |
| NLCC71SI | 71       | 2000  | 1500 X 1600 X 800 | 2070 x 1760 x 1305 | 10            | 695 X 760     | 375           | 475        |           |             |

<sup>\*</sup> Newtronic reserve the rights to change the product specifications without prior notice



















Temperature Range: 2°C to 8°C

### Walk-In Cold Room

### **Standard Equipment**

- Double walled with 60 mm PUF insulated modular panels with easy on-site
- SS 304 Interior & Exterior either SS 304 or Pre Coated GI.
- Stainless Steel Travs
- Observation window 300 x 300 mm
- PVC strip curtain for reducing temperature leakages
- Illuminated working area
- Flooring of Linoleum carpet
- Heater line along the door to avoid condensation
- Forced air circulation for uniform temperature
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- System is made up of split type condenser unit in well-ventilated area to avoid throw of hot air in the room
- Complete Operations driven through IOT-enabled Controller with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen Display
- High-quality PT-100 Temperature sensor
- Safety devices: Low temperature cut-off settable thermostat
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual

**Power supply:** 230/415 volts 50 Hz main supply. Also available with 60 Hz Cycle.



#### Also Available



### **SPECIFICATIONS**

Temperature Range : 2°C to 8°C Temperature Accuracy : ± 0.5°C Temperature Uniformity: ± 1°C

#### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- 8 pt. Temperature Scanner
- Stand by Cooling System with auto switch over
- Door Access system (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

### **Selection Guide**

| Model       | Capacity |        | Internal Size      | External Size      | Trays<br>Qty. | Trays Size |
|-------------|----------|--------|--------------------|--------------------|---------------|------------|
|             | CuFt.    | Liter  | (H*W*D) mm         | (H*W*D) mm         |               | (W*D) mm   |
| NLWC208SI   | 208      | 5,848  | 2000 X 1360 X 2150 | 2120 X 1480 X 2270 | 20            | 900 X 300  |
| NLWC250SI   | 250      | 7,017  | 2400 X 1360 X 2150 | 2520 X 1480 X 2270 | 28            | 900 X 300  |
| NLWC307SI1  | 307      | 8,600  | 2000 X 2000 X 2150 | 2120 X 2120 X 2270 | 20            | 900 X 600  |
| NLWC368SI1  | 368      | 10,320 | 2400 X 2000 X 2150 | 2520 X 2120 X 2270 | 28            | 900 X 600  |
| NLWC543SI1  | 543      | 15,216 | 2400 X 2000 X 3170 | 2520 X 2120 X 3290 | 42            | 900 X 600  |
| NLWC679SI   | 679      | 19,020 | 2400 X 2500 X 3170 | 2520 X 2620 X 3290 | 42            | 900 X 800  |
| NLWC1092SI1 | 1092     | 30,600 | 2400 X 2500 X 5100 | 2520 X 2620 X 5220 | 70            | 900 X 800  |
| NLWC1787SI  | 1787     | 50,040 | 3000 X 4000 X 4170 | 3120 X 4120 X 4290 | 126           | 900 X 600  |
| NLWC2857SI  | 2857     | 80,019 | 3000 X 5100 X 5230 | 3120 X 5220 X 5350 | 162           | 900 X 800  |

\*Custom Build Chambers also available | \* Models with Exterior powder coated GI sheet & Interior stainless steel (304) will be available on request. Standard Inner Heights: 2.0, 2.4, 3.0 Mt | Standard Inner Width: 1.36, 2.0, 2.5, 4.0 Mt | Standard Inner Depths: 2.0, 3.0, 4.0, 5.0 Mt

\* Newtronic reserve the rights to change the product specifications without prior notice.















Alarms











Documents

Temperature Range: -25°C to 0°C

### **Deep Freezers**



- Double walled with PUF insulation
- SS304 Interior & Exterior of Mild Steel
- Stainless Steel trays
- Metal Door with gasket & lock on the outside
- Forced air circulation for uniform temperature
- PU wheels for easy movement
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- Complete operation are driven through IOT-enabled Controller with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen Display
- High-quality PT-100 Temperature sensor
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ ,SOP & Maintenance Manual

**Power supply:** 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.



### **SPECIFICATIONS**

Temperature Range : -25°C to 0°C Temperature Accuracy : ± 3°C Temperature Uniformity: ± 5°C

#### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- 4 pt. Temperature Scanner
- Stand by Cooling System with auto switch over (700 litre & above)
- Door Access System (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

#### **Selection Guide**

| Model    | Capacity |       | Capacity          |                    | Internal Size | External Size | Trays<br>Qty. | Trays Size | Approx. W | /eight (Kg) |
|----------|----------|-------|-------------------|--------------------|---------------|---------------|---------------|------------|-----------|-------------|
|          | CuFt.    | Liter | (H*W*D) mm        | (H*W*D) mm         |               | (W*D) mm      | Eqip.         | Ship.      |           |             |
| NLDF7MI  | 7        | 200   | 510 X 560 X 700   | 1500 X 720 X 880   | 2             | 540 X 605     | 175           | 250        |           |             |
| NLDF11MI | 11       | 300   | 910 X 560 X 590   | 1955 X 720 X 770   | 3             | 540 X 495     | 225           | 300        |           |             |
| NLDF14MI | 14       | 400   | 910 X 560 X 785   | 1955 X 720 X 965   | 3             | 540 X 690     | 275           | 350        |           |             |
| NLDF25MI | 25       | 700   | 1200 X 800 X 730  | 2120 X 960 X 1020  | 4             | 780 X 635     | 300           | 375        |           |             |
| NLDF34MI | 34       | 1050  | 1200 X 1200 X 730 | 2110 X 1360 X 1020 | 8             | 515 X 635     | 325           | 425        |           |             |
| NLDF54MI | 54       | 1500  | 1200 X 1500 X 830 | 2110 X 1660 X 1120 | 8             | 660 X 735     | 350           | 450        |           |             |

\* Newtronic reserve the rights to change the product specifications without prior notice

























Temperature Range: -25°C to 0°C

### **Walk-In Deep Freezers**

### **Standard Equipment**

- Double walled with 125 mm PUF insulated modular panels with easy on-site
- SS 304 Interior & Exterior either SS 304 or Pre Coated GI
- Stainless Steel Trays
- PVC strip curtain for reducing temperature leakages
- Illuminated working area
- Flooring of Linoleum carpet
- Forced air circulation for uniform temperature
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- System is made up of split type condenser unit in well-ventilated area to avoid throw of hot air in the room
- Mechanism for equalizing air-pressure for door opening from inside
- Complete water-drainge facility with drain point, trays & piping
- Complete Operations driven through IOT-enabled Controller with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen Display
- High quality PT-100 Temperature Sensor
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual

#### Ante Room at 2-8°C

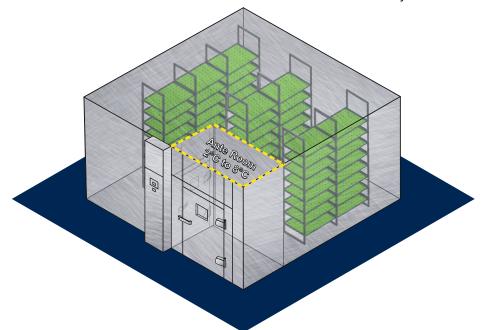
**Power supply:** 415 volts 50 Hz main supply. Also available with 60 Hz Cycle.

#### **SPECIFICATIONS**

: -25°C to 0°C Temperature Range Temperature Accuracy : ± 3°C Temperature Uniformity: ± 5°C

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- 8 pt. Temperature Scanner
- Stand by Cooling System with auto switch over
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System



Walk-In Deep Freezers (with Ante Room) are designed and manufactured as per customer requirements.

Newtronic reserve the rights to change the product specifications without prior notice



















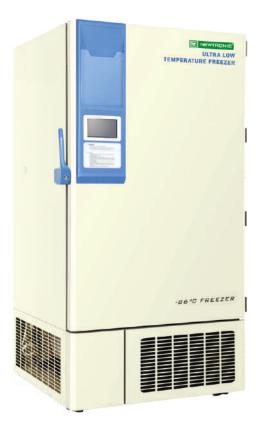




# **Ultra Low Temperature Freezers**



- SS 304 Interior and Exterior is made of PCGI
- Interior is made up of multiple compartments with inner sub doors for each
- The inner doors are of SS 304, low temperature tolerant, corrosion resistant and easy to clean
- All the six sides of the cabinet are made from high efficiency VIP PLUS vacuum thermal insulation plate
- Imported high efficiency compressor and EBM fans for energy saving and efficient refrigeration
- Vacuum release port to prevent vacuum formation and thus enable easy Door opening
- Low noise Design: Low noise direct cooling circuit; sound absorbing compartment and low noise fan
- Extended warm up time during power / freezer failure to provide sufficient time for carrying out backup plans
- Excellent uniformity under normal operating condition
- Fast recovery time upon resumption post door opening / power failure events
- Audio visual alarm notifications: High/Low Temperature excursions | Door Open



Power supply: 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.

### **SPECIFICATIONS**

Temperature Range : -60°C to -86°C

Temperature Accuracy : ± 5°C Temperature Uniformity: ± 10°C

### **Optional Accessories**

- Data Logger for ICDAS connectivity
- ICDAS A single software installation for all Newtronic make equipments
- Remote alarm system suitable for up to 4 nos. Newtronic make equipments
- Mobile Alert System

| Model    | Capacity    |      | Internal Size    | External Size      | Trays<br>Compart- |
|----------|-------------|------|------------------|--------------------|-------------------|
|          | CuFt. Liter |      | (H*W*D) mm       | (H*W*D) mm         | ment              |
| NLUF04MI | 04          | 100  | 514 X 450 X 439  | 820 X 1066 X 742   | 02                |
| NLUF14MI | 14          | 398  | 1266 X 404 X 696 | 1947 X 788 X 1041  | 02                |
| NLUF19MI | 19          | 528  | 1266 x 585 x 696 | 1947 x 930 x 1041  | 02                |
| NLUF23MI | 23          | 678  | 1286 x 750 x 696 | 1955 x 1090 x 1025 | 03                |
| NLUF27MI | 27          | 778  | 1286 x 865 x 696 | 1955 x 1205 x 1025 | 03                |
| NLUF30MI | 30          | 858  | 1378 x 877 x 696 | 2005 x 1217 x 1025 | 04                |
| NLUF36MI | 36          | 1008 | 1378x 1022 x 696 | 2002 x 1362 x 1025 | 04                |





### **Standard Equipment**

- SS 304 interior and exterior either SS 304 or mild steel
- Tightly sealed inner door made of tempered safety glass
- Direct heating via heaters wound around the chamber
- Perforated SS 304 shelves
- Humidification system with condensation protection
- Auto sterilization with hot air at 180°C along with Air Jacket formations
- Adjustable heat sterilization cycle
- Fan assisted air circulation to ensure superior uniformity, rapid recovery and minimum variation between cultures
- Complete prevention of desiccation no matter where your cultures are
- Complete operations are driven through a PLC controlling system with a colour touch screen display
- Superior mixing of CO<sub>2</sub> gas via specially designed air flow patterns
- ► IR-based CO<sub>2</sub> sensor for CO<sub>2</sub> monitoring and controlling (upto 20%)
- Audio visual alarms for deviations

### For the best in class Mammalian Cell Growth

### **SPECIFICATIONS**

Temperature Range : 18 °C to 50 °C

• CO<sub>2</sub> range: 0 to 20%

### **Optional Accessories**

- ICDAS A single software installation for all Newtronic make equipments
- Mobile Alert System

| Model   | Capacity<br>(Cu. Ft.) | Capacity<br>(Ltr) | Internal Size<br>(H*W*D) mm | External Size<br>(H*W*D) mm | Qty of Shelf | Shelf Size<br>(W*D) mm |
|---------|-----------------------|-------------------|-----------------------------|-----------------------------|--------------|------------------------|
| NLC03MI | 3                     | 100               | 500 X 450 X 450             | 845 X 590 X 765             | 2            | 430 X 430              |
| NLC06MI | 6                     | 170               | 600 X 600 X 470             | 945 X 740 X 770             | 2            | 580 X 450              |







Temperature Range: 10°C to 60°C

# **BOD Incubators (Refrigerated Incubators)**



- Double walled with PUF insulation
- SS 304 Interior & Exterior either SS 304 or Mild Steel
- Stainless Steel trays
- Full length inner glass door with magnetic gaskets
- LED light for better illumination & observation (200 liters & above)
- Forced air circulation for uniform temperature
- PU wheels for easy movement
- U shaped SS tubular heaters
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- Complete operation are driven through IOT-enabled Controller with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen Display
- High-quality PT-100 Temperature sensor
- Safety devices: Low & high temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ ,SOP & Maintenance Manual

Power supply: 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.



### **SPECIFICATIONS**

: 10°C to 60°C Temperature Range Temperature Accuracy : ± 0.5°C Temperature Uniformity :  $\pm 1$ °C

#### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- 4 pt. Temperature Scanner
- Stand by Cooling System with auto switch over (430 litre & above)
- Door Access system (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

#### **Selection Guide**

| Model    | Capacity |       | Capacity          |                    | Internal Size | External Size | Trays<br>Qty. | Trays Size | Approx. W | eight (Kg) |
|----------|----------|-------|-------------------|--------------------|---------------|---------------|---------------|------------|-----------|------------|
|          | CuFt.    | Liter | (H*W*D) mm        | (H*W*D) mm         |               | (W*D) mm      | Eqip.         | Ship.      |           |            |
| NLBI7SI  | 7        | 200   | 800 X 500 X 500   | 1315 x 660 x 965   | 3             | 430 X 460     | 150           | 225        |           |            |
| NLBI16SI | 16       | 430   | 1200 X 600 X 600  | 1715 x 760 x 1105  | 4             | 530 X 560     | 250           | 325        |           |            |
| NLBI26SI | 26       | 735   | 1500 X 700 X 700  | 2070 x 860 x 1205  | 5             | 630 X 660     | 275           | 350        |           |            |
| NLBI34SI | 34       | 1000  | 1500 X 800 X 800  | 2070 x 960 x 1305  | 5             | 730 X 760     | 350           | 425        |           |            |
| NLBI54SI | 54       | 1500  | 1500 X 1600 X 600 | 2070 x 1760 x 1105 | 10            | 695 X 560     | 350           | 450        |           |            |
| NLBI71SI | 71       | 2000  | 1500 X 1600 X 800 | 2070 x 1760 x 1305 | 10            | 695 X 760     | 375           | 475        |           |            |

### Also available in PELTIER TECHNOLOGY

\* Newtronic reserve the rights to change the product specifications without prior notice



Ethernet















Temperature Range: 10°C to 60°C

### **Walk-In Incubators**



- Double walled with 60 mm PUF insulated modular panels with easy on-site
- SS 304 Interior & Exterior either SS 304 or Pre Coated G.I.
- Stainless Steel Travs
- Observation window 300 x 300 mm
- PVC strip curtain for reducing temperature leakages
- Illuminated working area
- Flooring of Linoleum carpet
- Heater line along the door to avoid condensation
- U shaped SS tubular heaters
- Forced air circulation for uniform temperature
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation coil & condenser
- System is made up of split type condenser unit in well-ventilated area to avoid throw of hot air in the room
- Complete Operations driven through IOT-enabled Controller with data logging capacity of upto 1000 readings
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen Display
- High-quality PT-100 Temperature sensor
- Safety devices: Low & High temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ, SOP & Maintenance Manual

**Power supply:** 230/415 volts 50 Hz main supply. Also available with 60 Hz Cycle.

### **SPECIFICATIONS**

: 10°C to 60°C Temperature Range Temperature Accuracy : ± 0.5°C

Temperature Uniformity :  $\pm 1$ °C

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- 8 pt. Temperature Scanner
- Stand by Cooling System with auto switch over
- Door Access system (Numeric or Biometric)
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

| Model      | Capacity |        | Internal Size      | External Size      | Trays<br>Qty. | Trays Size |
|------------|----------|--------|--------------------|--------------------|---------------|------------|
|            | CuFt.    | Liter  | (H*W*D) mm         | (H*W*D) mm         |               | (W*D) mm   |
| NLWI208SI  | 208      | 5,848  | 2000 X 1360 X 2150 | 2120 X 1480 X 2270 | 20            | 900 X 300  |
| NLWI250SI  | 250      | 7,017  | 2400 X 1360 X 2150 | 2520 X 1480 X 2270 | 28            | 900 X 300  |
| NLWI307SI  | 307      | 8,600  | 2000 X 2000 X 2150 | 2120 X 2120 X 2270 | 20            | 900 X 600  |
| NLWI368SI1 | 368      | 10,320 | 2400 X 2000 X 2150 | 2520 X 2120 X 2270 | 28            | 900 X 600  |
| NLWI543SI  | 543      | 15,216 | 2400 X 2000 X 3170 | 2520 X 2120 X 3290 | 42            | 900 X 600  |
| NLWI679SI  | 679      | 19,020 | 2400 X 2500 X 3170 | 2520 X 2620 X 3290 | 42            | 900 X 800  |
| NLWI1092SI | 1092     | 30,600 | 2400 X 2500 X 5100 | 2520 X 2620 X 5220 | 70            | 900 X 800  |
| NLWI1787SI | 1787     | 50,040 | 3000 X 4000 X 4170 | 3120 X 4120 X 4290 | 126           | 900 X 600  |
| NLWI2857SI | 2857     | 80,019 | 3000 X 5100 X 5230 | 3120 X 5220 X 5350 | 162           | 900 X 800  |

<sup>\*</sup>Custom Build Chambers also available | \* Models with Exterior powder coated GI sheet & Interior stainless steel (304) will be available on request. Standard Inner Heights: 2.0, 2.4, 3.0 Mt | Standard Inner Width: 1.36, 2.0, 2.5, 4.0 Mt | Standard Inner Depths: 2.0, 3.0, 4.0, 5.0 Mt

<sup>\*</sup> Newtronic reserve the rights to change the product specifications without prior notice.

























Upper Temperature : 10°C to 60°C Lower Temperature : 10°C to 60°C

### **Dual Incubators**



- Double walled with PUF insulation
- ▶ SS 304 Interior & Exterior either SS 304 or Mild Steel
- > Two separate Compartments operating at different temperature values
- Stainless Steel trays
- Full length inner glass door & outer metal door with gasket & lock on the outside
- Forced air circulation for uniform temperature
- PU wheels for easy movement
- U shaped SS tubular heaters
- CFC free cooling system consisting of hermetically sealed compressor coupled with evaporation condenser
- Complete operations driven through IOT-enabled Controller with data logging capacity of upto 1000 reading
- High speed Ethernet based communication
- All operations through a single 7" Color Touch Screen Display
- High-quality PT-100 Temperature sensor
- ▶ Safety devices: Low & High temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ, SOP & Maintenance Manual

**Power supply:** 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.



### **SPECIFICATIONS**

Temperature Range : 10°C to 60°C
 Temperature Accuracy : ± 0.5°C
 Temperature Uniformity : ± 1°C

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

#### Selection Guide

| Model      | Capacity   |             | Capacity Internal Size External Size |                   | Trays<br>Qty. | Trays Size | Approx. W | /eight (Kg) |
|------------|------------|-------------|--------------------------------------|-------------------|---------------|------------|-----------|-------------|
|            | CuFt.      | Liter       | (H*W*D) mm                           | (H*W*D) mm        |               | (W*D) mm   | Eqip.     | Ship.       |
| NLDC14SI   | Upper - 7  | Upper - 200 | Upper - 690 X 600 X 500              | 2050 X 740 X 985  | Upper - 2     | 530 X 460  | 300       | 375         |
| INEDO 1431 | Lower - 7  | Lower - 200 | Lower - 690 X 600 X 500              | 2000 X 740 X 900  | Lower - 2     |            |           | 070         |
| NLDC28SI   | Upper - 14 | Upper - 400 | Upper - 690 X 700 X 800              | 2050 X 840 X 1285 | Upper - 2     | 630 X 760  | 375       | 450         |
| INLDG2031  | Lower - 14 | Lower - 400 | Lower - 690 X 700 X 800              | 2000 X 040 X 1200 | Lower - 2     | 030 X 700  | 3/3       | 450         |

### Also available in PELTIER TECHNOLOGY

\* Newtronic reserve the rights to change the product specifications without prior notice













# **Bacteriological Incubators**



- Double walled with PUF insulation
- SS 304 Interior & Exterior either SS 304 or Mild Steel
- Stainless Steel trays
- Forced air circulation for uniform temperature
- PU wheels for easy movement
- SS tubular heaters
- Complete operations driven through PID controller with data logging capacity of upto 1000 readings and with online print facility
- High speed Ethernet based communication
- High-quality PT-100 Temperature sensor
- Safety devices: High temperature cut-off settable thermostats
- Audio/Visual alarms for deviations
- Complete with DQ, IQ, OQ, PQ ,SOP & Maintenance Manual

Power supply: 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.



### **SPECIFICATIONS**

Temperature Range

: (Ambient+5)°C to 60°C

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

| Model    | Capacity |       | Internal Size    | External Size     | Trays<br>Qty. | Trays Size |
|----------|----------|-------|------------------|-------------------|---------------|------------|
|          | CuFt.    | Liter | (H*W*D) mm       | (H*W*D) mm        |               | (W*D) mm   |
| NLL13SE  | 3        | 90    | 450 X 450 X 450  | 800 X 560 X 760   | 2             | 430 X 430  |
| NLLI5SE  | 5        | 121   | 600 X 450 X 450  | 950 X 560 X 820   | 2             | 430 X 430  |
| NLL18SE  | 8        | 216   | 600 X 600 X 600  | 950 X 760 X 1030  | 2             | 560 X 560  |
| NLLI12SE | 12       | 324   | 900 X 600 X 600  | 1410 X 760 X 1060 | 3             | 560 X 560  |
| NLLI16SE | 16       | 430   | 1200 X 600 X 600 | 1710 X 760 X 1125 | 4             | 560 X 560  |
| NLLI26SE | 26       | 735   | 1500 X 700 X 700 | 2010 X 860 X 1225 | 5             | 660 X 660  |
| NLLI34SE | 34       | 1000  | 1500 X 800 X 800 | 2010 X 960 X 1325 | 5             | 760 X 760  |













<sup>\*</sup> Newtronic reserve the rights to change the product specifications without prior notice

# **Laboratory Ovens**



- > Double walled with mineral wool insulation.
- ▶ SS 304 Interior & Exterior either SS 304 or Mild Steel
- Mesh type Stainless Steel trays
- Forced air circulation for uniform temperature
- SS tubular heater
- Auto tune PID controller with 2 line LED display as well as ramp & soak facility
- High quality PT-100 Temperature Sensor
- Safety Device : High Temperature cut-off settable thermostats
- Audio/Visual alarms for deviation
- ► Complete with DQ, IQ, OQ, PQ ,SOP & Maintenance Manual

Power supply: 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.



### **SPECIFICATIONS**

Temperature Range : 50°C to 300°C

### **Optional Accessories**

- ▶ ICDAS -A Single Software installation for all Newtronic make equipments
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

### Selection Guide

| Model    | Capacity |       | Internal Size    | External Size     | Trays<br>Qty. | Trays Size |
|----------|----------|-------|------------------|-------------------|---------------|------------|
|          | CuFt.    | Liter | (H*W*D) mm       | (H*W*D) mm        |               | (W*D) mm   |
| NLL03SE  | 3        | 90    | 450 X 450 X 450  | 800 X 560 X 760   | 2             | 430 X 430  |
| NLL05SE  | 5        | 121   | 600 X 450 X 450  | 950 X 560 X 820   | 2             | 430 X 430  |
| NLL08SE  | 8        | 216   | 600 X 600 X 600  | 950 X 760 X 1030  | 2             | 560 X 560  |
| NLL012SE | 12       | 324   | 900 X 600 X 600  | 1410 X 760 X 1060 | 3             | 560 X 560  |
| NLL016SE | 16       | 430   | 1200 X 600 X 600 | 1710 X 760 X 1125 | 4             | 560 X 560  |
| NLL026SE | 26       | 735   | 1500 X 700 X 700 | 2010 X 860 X 1225 | 5             | 660 X 660  |
| NLL034SE | 34       | 1000  | 1500 X 800 X 800 | 2010 X 960 X 1325 | 5             | 760 X 760  |

<sup>\*</sup>Last 3 models having temperature range from 50°C to 110°C

Also available: I-series Models with 21 CFR part 11 connectivity; ramp & soak facility and print facility







### Vacuum Ovens



- The interior and the exterior of the chamber is made of stainless steel (SS304)
- Fitted with highly accurate controller that allows gentle drying of heat sensitive materials avoiding damage due to rapid temperature overshooting
- Considerable reduction in drying time | Dries faster than the conventional oven
- Separate vacuum release valve releasing vacuum by gentle turning of the knob
- Separate vacuum connection valve preventing oil spilling in the oven
- Vacuum pump connection provided at the back of the oven
- Calibrated vacuum gauge
- The door is provided with silicon gasket & positive latch to maintain seal at all vacuum levels
- Door with glass window for viewing of the sample inside the chamber
- Heater mounted below the tray, ensures rapid & equal heating without any thermal
- High quality PT-100 Temperature Sensor
- Safety Device: Electromagnetic relay
- Audio/Visual alarms for deviation
- Complete with DQ, IQ, OQ, PQ, SOP & Maintenance Manual

**Power supply:** 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.



#### **SPECIFICATIONS**

: 40°C to 200°C Temperature Range

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- Remote alarm system suitable for upto 4 nos. Newtronic make equipments
- Mobile Alert System

### **Selection Guide**

| Model   | Capacity |       | Internal Size   | External Size   | Trays<br>Qty. | Approx. W | Approx. Weight (Kg) |  |
|---------|----------|-------|-----------------|-----------------|---------------|-----------|---------------------|--|
|         | CuFt.    | Liter | (H*W*D) mm      | (H*W*D) mm      |               | Eqip.     | Ship.               |  |
| NLV01SE | 1        | 30    | 275 X 300 X 300 | 655 X 440 X 420 | 1             | 35        | 65                  |  |

Also available: I-series Models with 21 CFR part 11 connectivity; ramp & soak facility and print facility







Temperature Range: 50°C to 110°C

# **Pass Through Ovens**



### **Standard Equipment**

- Double walled with mineral wool insulation
- SS 304 Interior & Exterior either SS 304 or Mild Steel
- Double door opening; each on opposite side double door with interlocking facility
- Mesh type stainless steel trays
- Forced air circulation for uniform temperature
- SS tubular heater
- PU wheels for easy movement
- Micro processor based auto tune PID controller with 2 line LED display
- High quality PT-100 temperature sensor
- Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual

**Power supply:** 230 volts 50 Hz main supply. Also available with 60 Hz Cycle.

### **SPECIFICATIONS**

: 50°C to 110°C Temperature Range

| Model    | Capacity |       | Internal Size    | External Size      | Trays<br>Qty. | Trays Size | Approx. W | /eight (Kg) |
|----------|----------|-------|------------------|--------------------|---------------|------------|-----------|-------------|
|          | CuFt.    | Liter | (H*W*D) mm       | (H*W*D) mm         |               | (W*D) mm   | Eqip.     | Ship.       |
| NLPT16SE | 16       | 430   | 1200 X 600 X 600 | 1485 X 1290 X 840  | 4             | 560 X 560  | 250       | 325         |
| NLPT26SE | 26       | 735   | 1500 x 700 x 700 | 2095 x 860 x 905   | 5             | 660 X 660  | 300       | 375         |
| NLPT34SE | 34       | 1000  | 1500 X 800 X 800 | 1785 X 1490 X 1040 | 5             | 760 X 760  | 350       | 425         |

<sup>\*</sup>Capacities lesser or greater than those stated above are available upon request









- Unique Slim design with Outer of SS304 and Inner Tank of SS316
- Insulated tank for better performance
- Top-Opening lid, with single lever mechanism and self-bulge seal rim
- PU wheels for easy movement
- Class A PT-100 4pt. Scanner for accurate control/monitoring
- All operations through a single 7" Color Touch Screen Display
- Complete Operations driven through IOT enabled controller with data logging
- 6 nos. of pre-loaded recipes (customizable)
- Safety valve for over pressure protection with automatic release of pressure
- Automatic shutdown upon completion of sterilization cycle with release of pressure
- Audio/Visual notification upon cycle completion
- Audio/Visual Alarms for low water level; Temperature deviations
- FO value and Batch-wise Report
- Safety Features: Over-pressure protection; Temperature Cut-off; emergency venting system and automatic pressure lever lock mechanism
- Complete with DQ, IQ, OQ, PQ & SOP & Maintenance Manual
- 21 CFR Part II Ready Software
- Traceable audit trails and alarm reports

REPORT BEFORE AUTOCLAVE

**Power supply:** 230 volts 50 Hz main supply.

### **SPECIFICATIONS**

Temperature Range: 100°C to 125°C Pressure Range : up to 2 Bar

### **Optional Accessories**

- ICDAS -A Single Software installation for all Newtronic make equipments
- SS Wire Mesh Baskets

| Model No | Capacity |       | Tank Size    | External Size    | Basket Size  | No. of<br>Baskets | Approx.<br>Weight (Kg) |
|----------|----------|-------|--------------|------------------|--------------|-------------------|------------------------|
|          | CuFt.    | Liter | (Dia x D) mm | (H x W x D) mm   | (Dia x D) mm |                   | Eqip.                  |
| NLAC2SI  | 2        | 50    | 350 x 540    | 995 x 785 x 570  | 300 x 500    | 1                 | 50                     |
| NLAC3SI  | 3        | 100   | 450 x 630    | 1085 x 885 x 670 | 400 x 600    | 1                 | 74                     |
| NLAC5SI  | 5        | 150   | 550 x 630    | 1085 x 985 x 770 | 500 x 600    | 1                 | 98                     |
| NLAC7SI  | 7        | 200   | 550 x 850    | 1305 x 985 x 770 | 500 x 400    | 2                 | 120                    |









<sup>\*</sup> Newtronic reserve the rights to change the product specifications without prior notice

# **Biological Safety Cabinet**



### **Standard Equipment**

- Exterior available in PCGI or SS304
- Interior available in SS304 or SS316 or SS316L
- Single piece SS working table which can be easily removable for easy cleaning
- Multiple side-entry for Gas knobs
- 4mm Tempered Sliding Glass Door with counter-weight arrangement
- Intermediate pre filter
- H14 HEPA Filter (99.97% down to 0.3 micron)
- Microprocessor based Controller
- UV light with timer
- Optimal performance of air velocity, airflow and uniformity through dynamic balanced blower/motor
- State-of-the-art Display:
  - Sash status
  - Air Pressure
  - **UV** Light status
  - UV Burning Hours
  - **HEPA** status
- Audio & visual alarms for airflow, pressure and sash height
- Digital Pressure monitor
- Door interlock for UV light and blower

Power supply: 230 volts 50 Hz main supply.

### **AVAILABLE IN**

- Class II A2
- Class II B2

### **Optional Accessories**

Virus burn unit

| Classification | Model   | Internal Size    | Internal Size External Size |       |
|----------------|---------|------------------|-----------------------------|-------|
|                |         | (H x W x D) mm   | (H x W x D) mm              | Eqip. |
|                | NLBS2A2 | 610 x 610 x 610  | 2200 x 720 x 800            | 130   |
| Class II A2    | NLBS3A2 | 610 x 915 x 610  | 2200 x 1030 x 800           | 155   |
|                | NLBS4A2 | 610 x 1220 x 610 | 2200 x 1330 x 800           | 168   |
|                | NLBS2B2 | 610 x 610 x 610  | 2200 x 720 x 800            | 130   |
| Class II B2    | NLBS3B2 | 610 x 915 x 610  | 2200 x 1030 x 800           | 155   |
|                | NLBS4B2 | 610 x 1220 x 610 | 2200 x 1330 x 800           | 168   |

<sup>\*</sup> Newtronic reserve the rights to change the product specifications without prior notice







### **Laminar Air Flow Cabinet**



### **Standard Equipment**

- Exterior available in PCGI or SS304
- Interior available in SS304 or SS316 or SS316L
- SS operation table and acrylic side baffle
- Compact design for Ultraclean dustfree environment
- Fully enclosed sides to create positive pressure inside the cabinet
- Intermediate pre filter
- H14 HEPA Filter (99.97% down to 0.3 micron)
- UV light with timer
- Optimal performance of air velocity, airflow and uniformity through dynamic balanced blower/motor
- State-of-the-art Display:
  - Sash status
  - Air Pressure
  - · UV Light status
  - UV Burning Hours
  - HEPA status
- Audio & visual alarms for airflow and sash height
- Multiple side entry for Gas knob

Power supply: 230 volts 50 Hz main supply.

### **AVAILABLE IN**

- Horizontal
- Vertical

| Model  |        | Internal Size    | External Size     | Approx. Weight (Kg) |
|--------|--------|------------------|-------------------|---------------------|
|        |        | (H x W x D) mm   | (H x W x D) mm    | Eqip.               |
| NLHL2S | NLHL2M | 610 x 610 x 610  | 2080 x 720 x 870  | 90                  |
| NLHL3S | NLHL3M | 610 x 915 x 610  | 2080 x 1030 x 870 | 115                 |
| NLHL4S | NLHL4M | 610 x 1220 x 610 | 2080 x 1330 x 870 | 133                 |

<sup>\*</sup> Newtronic reserve the rights to change the product specifications without prior notice







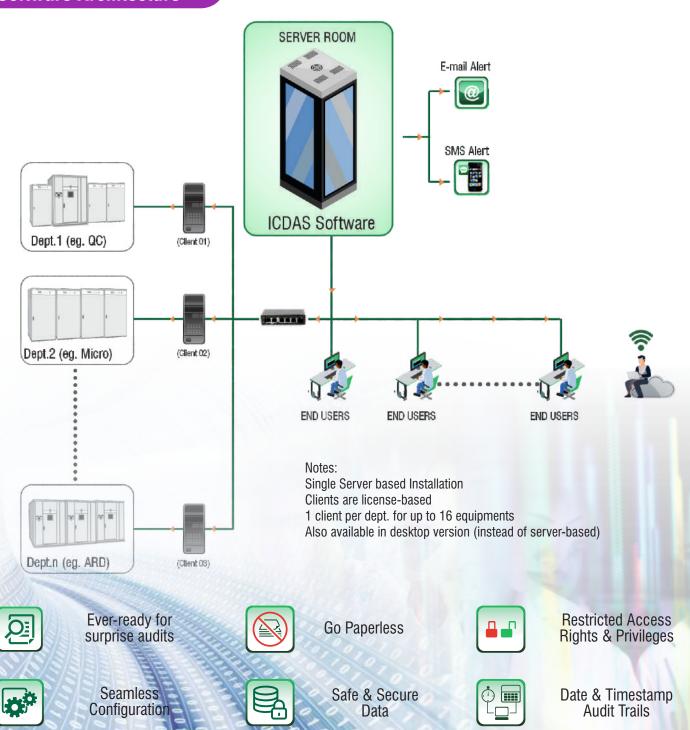
### **ICDAS - A Web-based Software**

# Access Anywhere Anytime



NEWTRONIC'S ICDAS software changes the landscape of Stability Operations & Chamber Management. While it very effectively complies to the requirements of 21 CFR Part 11, it also meets the increasing demands for improved operational efficiencies. This server-based software gives the flexibility to operate the chambers remotely through any web browser and gives additional capabilities of going Paperless and system-based alert notifications of pending tasks.

### **Software Architecture**



# Fast | Simple | Economical | Reliable



Instantly connect and control your chambers from anywhere without installing software.

### **Key Features**



#### Installation

- Cloud-based Software accessible through Browser
- Installation that is one-time for Lifetime! Eliminate the need for multiple software installation & qualifications!



### **Data Management**

- GO PAPERLESS!! e-Review, e-Approval, e-Signature, e-Comments of: Data Logs | Alarms | Audit Trails
- Multi-level data authorization (through e-review & e-approval)
- Comprehensive Audit Trails of Alarms, User activity, Equipment settings, email & SMS generation
- Stay Audit-Ready every single day through Supervisory Email facility!
- Run-time calculation of MKT
- Real-time display of all connected equipment in single screen



### **Configuration**

- Configure multiple user-groups (Operator, Supervisor, Admin, etc)
- Department-wise segregation of users, equipment & data
- Plant-wide harmonization of reporting format (header, footer, etc.)
- Configure the type & no. of alarms to be sent via email/SMS & configure delay time too



### Safe & Secure

- Automatic & Manual daily data backup facility. Automatic data backup can be done both, remotely & locally
- Additional features of Data Archival & Data Restore



#### **Other Features**

- Viewing I/O Status & Running Hours of all major components. Component running hours to determine the shelf-life of major components
- Centralized user-defined Alarms, Alerts & Notifications through SMS & emails
- System Diagnosis for troubleshooting via Team Viewer
- Software to keep you USFDA 21 CFR Part 11 Ready



### LDAP

 LDAP (Light-weight Directory Access Protocol) Integration: Access ICDAS through your corporate email id/password

# **Peltier Technology**

"Stability Chambers and Incubators without refrigeration and no compressor inside"

# Thermocouple Working Principle

The working principle of a thermocouple is based on the Seebeck, Peltier, and Thomson effects.

# **Peltier Effect**

The Peltier effect is the absorption or release of heat when an electric current passes through a junction of two different conductors.

Peltier Cooling, also known as Thermoelectric Cooling, has many advantages, including:



### **Precise Temperature Control**

The temperature regulation can be fine-tuned to meet precise requirements. They are highly responsive to temperature changes and quickly adjust to the hot and cold needs.



### **Compact & Light-weight**

This makes the Peltier cooling systems easily portable and quick to attend to any support call.



### **Environment-friendly**

Since they do not use ozone-depleting or flammable refrigerants, they are very eco-friendly systems.



### **Durable**

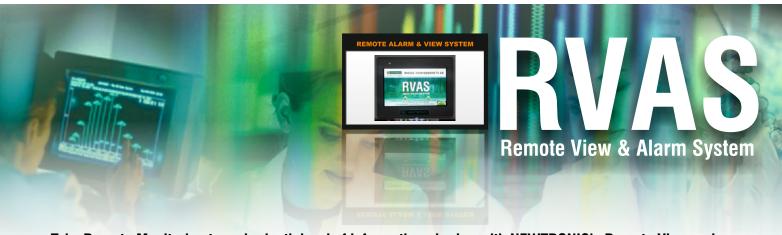
Peltier Cooling Systems are easy to operate and maintain. They can easily last for over a hundred thousand hours!



### **Quiet & Vibration Free**

Peltier cooling systems do not have any compressors. Thus, there are no moving parts thereby ensuring quiet & vibration-free operations.

# **Introducing Remote View & Alarm System (RVAS)**

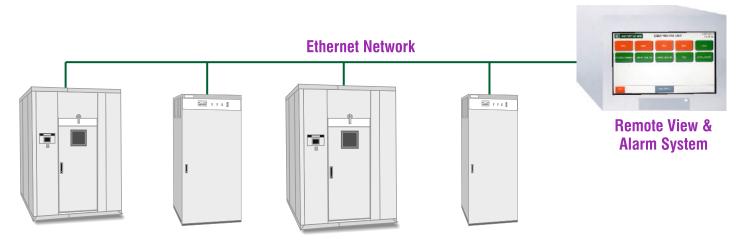


Take Remote Monitoring to an in-depth level of information-sharing with NEWTRONIC's Remote View and Alarm System (RVAS).

### **RVAS Features:**

- 1. View & Acknowledge real-time T/RH reading of EACH sensor
- 2. View status of each I/O Components (humidifier, heater, compressor, etc)
- 3. View status of Utilities (Main Supply, Door, Water Level)





**Equipments on Ethernet Network** 

### **Other Features:**

- 7" colour touch screen display
- Connect upto 20 equipments on TCP/IP with on-site programming
- Eliminate the need for cabling

- Audio hooter & Visual display to notify alarms & deviations
- Department-wise segregation of users & chambers
- System Diagnosis
- IQ, OQ protocols







Alerts 24/7



Alerts Groups



Multiple Interfaces

### Internationally proven innovative product range



### **Newtronic Service Centers:**

| Domestic:  |   | International  | :  |  |  |
|--|---|--|--|--|--|
| Ahmedabad<br>Baddi<br>Bangalore<br>Chennai<br>Delhi<br>Goa | Hyderabad / Vizag<br>Indore<br>Kolkata / Sikkim<br>Mumbai<br>Pune | Algeria Australia Bangladesh China Egypt Ethiopia Indonesia Iran | Iraq Jordan Kazakhistan KSA Latin America Malaysia Morocco Nepal | New Zealand Nigeria Oman Philippines Russia Singapore Sri Lanka Thailand | Turkey<br>Uganda<br>UK<br>USA<br>Vietnam |
| ser  | service@newtronic.in  |  | service.exports(   | @newtronic.in  |  |

 $<sup>^{\</sup>star}\,$  Newtronic reserve the right to change product specifications without prior notice



NEWTRONIC LIFECARE EQUIPMENT PVT. LTD. ISO 9001:2015 | ISO 13485:2016 | NABL ISO/IEC 17025:2005

Email:

India : sales@newtronic.in
International : exports@newtronic.in

Visit us on: www.newtronic.in

#### H.O.:

Kanakia Wall Street, A- Wing-612 Unit, 6th Floor, Chakala, Andheri Kurla Road, Nr.Chakala Metro Station, Andheri (East), Mumbai- 400093. India T: +91 22 6853 4600

#### **Plant**

Plot No-1205 & 1206, G.I.D.C. Ind. Estate, Road No.: 13, At Umbergaon -396171, Dist.-Valsad (Gujarat) T: 0260-2561411/22/33 /77