



# DRUG STABILITY TEST CHAMBER LDST-A2 SERIES

## Drug Stability Test Chamber LDST-A20

Drug Stability Test Chamber LDST-A20 designed with 100 L internal capacity volume. It offers 20 to 98 % RH humidity range and temperature ranges from 0°C to 100°C. Designed to simulate constant climatic conditions for testing a wide variety of pharmaceutical raw Drug material or finished Drug products for their quality, performance, shelf life and stability. It features conductive film located on the interior glass (of double layer 8 cm thick insulation glass) to prevent window frosting, built-in LED light for the work room lighting to clearly observe samples. A good temperature humidity chamber is essential for evaluating potential success or failure of a product in the field.

## Drug Stability Test Chamber LDST-A21

Drug Stability Test Chamber LDST-A21 designed with 225 L internal capacity volume. It offers 20 to 98 % RH humidity range and temperature ranges from 0°C to 100°C. Designed to simulate constant climatic conditions for testing a wide variety of pharmaceutical raw Drug material or finished Drug products for their quality, performance, shelf life and stability. It features conductive film located on the interior glass (of double layer 8 cm thick insulation glass) to prevent window frosting, built-in LED light for the work room lighting to clearly observe samples. A good temperature humidity chamber is essential for evaluating potential success or failure of a product in the field.



## **Drug Stability Test Chamber LDST-A22**

Drug Stability Test Chamber LDST-A22 designed with 500 L internal capacity volume. It offers 20 to 98 % RH humidity range and temperature ranges from 0°C to 100°C. Designed to simulate constant climatic conditions for testing a wide variety of pharmaceutical raw Drug material or finished Drug products for their quality, performance, shelf life and stability. It features conductive film located on the interior glass (of double layer 8 cm thick insulation glass) to prevent window frosting, built-in LED light for the work room lighting to clearly observe samples. A good temperature humidity chamber is essential for evaluating potential success or failure of a product in the field.

## **Drug Stability Test Chamber LDST-A23**

Drug Stability Test Chamber LDST-A23 designed with 800L internal capacity volume. It offers 20 to 98 % RH humidity range and temperature ranges from 0°C to 100°C. Designed to simulate constant climatic conditions for testing a wide variety of pharmaceutical raw Drug material or finished Drug products for their quality, performance, shelf life and stability. It features conductive film located on the interior glass (of double layer 8 cm thick insulation glass) to prevent window frosting, built-in LED light for the work room lighting to clearly observe samples. A good temperature humidity chamber is essential for evaluating potential success or failure of a product in the field.

## **Drug Stability Test Chamber LDST-A24**

Drug Stability Test Chamber LDST-A24 designed with 1000L internal capacity volume. It offers 20 to 98 % RH humidity range and temperature ranges from 0°C to 100°C. Designed to simulate constant climatic conditions for testing a wide variety of pharmaceutical raw Drug material or finished Drug products for their quality, performance, shelf life and stability. It features conductive film located on the interior glass (of double layer 8 cm thick insulation glass) to prevent window frosting, built-in LED light for the work room lighting to clearly observe samples. A good temperature humidity chamber is essential for evaluating potential success or failure of a product in the field.

## Features :

- ❑ Designed with PID controller system to control main unit, temperature system and Display
- ❑ Double layer insulating glass 8 cm thick, made of tempered glass
- ❑ Internal material designed with mirror surface finishing, 304 stainless steel which is rust proof, corrosion resistance
- ❑ Heat load can absorb 1000 W in -20°C
- ❑ Built-in LED light for the working room light which clearly observe samples
- ❑ The filter element is suggested to be replaced once a year
- ❑ Water re-circulation system consisting of water purifier which purifies sourced water to water tank, reduces water use and series of pipes
- ❑ Designed with PT-100 sensor, real time accurate detection and display of temperature
- ❑ Wet gauze and a real-time temperature, converted by temperature difference, show real-time relative humidity
- ❑ LCD display, which can display test conditions
- ❑ Equipped with automatic humidification, which automatically heated by the humidification tank
- ❑ High and low temperature corrosion resistance external material is made up of A3 steel plate with galvanized coating
- ❑ Provides protection against over temperature, water shortage, over current, earth leakage, phase sequence, humidifier dry combustion, and refrigerant high pressure
- ❑ 10 cm thick polyurethane foam and insulation cotton provides better insulation
- ❑ Standard test Cable hole 50 mm inner diameter, located at left side of work room, is provided with sieve inside to prevent moisture from entering the room
- ❑ SUS304 stainless steel shelves, standard configuration 2 pcs (removable, adjustable height), 50 kg sample load of each shelf
- ❑ 4 movable castors for ease moving, and with brakes function

## Application :

Drug Stability Test Chamber is used in food industry also basic used in advanced research, Pharmaceutical Drug stability testing point, chemical industries, and including testing products relating to aerospace, electronics, automobile and environmental stress screening etc.

## Specifications:

Model	LDST-A20	LDST-A21
Interior Volume	100 L	225 L
Heat load	1000 W	1000 W
Temperature Range	0°C to 100°C	0°C to 100°C
Temperature Deviation in time	± 2.0°C	± 2.0°C
Temperature Fluctuation	± 0.5°C	± 0.5°C
Humidity Range	20% to 98% RH	20% to 98% RH
Humidity Deviation in time	± 2.5% RH	± 2.5% RH
Cooling Rate	1°C / min	1°C / min
Heating Rate	3°C / min	3°C / min
Cooling system	Mechanical compression refrigeration system	Mechanical compression refrigeration system
Refrigerating unit	French TECUMSEH compressor	French TECUMSEH compressor
Refrigerant	R404A, R23	R404A, R23
Heating Element	Nichrome heater	Nichrome heater
Controller	Programmable color LCD touch screen controller Ethernet connection, PC Link	Programmable color LCD touch screen controller Ethernet connection, PC Link
Water supply system	Automatic water supply Water purification system	Automatic water supply Water purification system

# Drug Stability Test Chamber LDST-A2 Series

Humidifier	External isolation, stainless steel surface evaporation humidifier	External isolation, stainless steel surface evaporation humidifier
Dehumidification	Evaporator	Evaporator
Temperature Sensor	PTR Platinum Resistance PT100 $\Omega$ /MV A-class, accuracy 0.001°C	PTR Platinum Resistance PT100 $\Omega$ /MV A-class, accuracy 0.001°C
Humidity Sensor	Dry and wet bulb sensor	Dry and wet bulb sensor
Build-in Water Tank	270 × 300 × 400 mm	270 × 300 × 400 mm
View Window Size	250 × 280 mm	250 × 280 mm
Air Circulation	Centrifugal wind fan	Centrifugal wind fan
Exterior Material	Steel Plate with protective coating	Steel Plate with protective coating
Interior Material	SUS304 stainless steel	SUS304 stainless steel
Thermal Insulation	Polyurethane foam and insulation cotton	Polyurethane foam and insulation cotton
Observation Window	Interior lighting, double-layer thermo stability silicone rubber sealing	Interior lighting, double-layer thermo stability silicone rubber sealing
Standard Configuration	1 Cable hole ( $\Phi$ 50,) with plug; 2 shelves	1 Cable hole ( $\Phi$ 50,) with plug; 2 shelves
Maximum Noise	65 d BA	65 d BA
Ambient Temperature	5°C to +35°C	5°C to +35°C
Relative Humidity	≤ 85% RH	≤ 85% RH
Internal dimension	400 × 500 × 500 mm	500 × 600 × 750 mm
External dimension	860 × 1050 × 1620 mm	960 × 1150 × 1860 mm
Power Supply	220 V, 50 Hz / 380 V, 50 Hz	220 V, 50 Hz / 380 V, 50 Hz
Net weight	290 kg	400 kg
Gross weight	340 kg	440 kg

## Specifications:

Model	LDST-A22	LDST-A23
Interior Volume	500 L	800 L
Heat load	1000 W	1000 W
Temperature Range	0°C to 100°C	0°C to 100°C
Temperature Deviation in time	± 2.0°C	± 2.0°C
Temperature Fluctuation	± 0.5°C	± 0.5°C
Humidity Range	20% to 98% RH	20% to 98% RH
Humidity Deviation in time	± 2.5% RH	± 2.5% RH
Cooling Rate	1°C / min	1°C / min
Heating Rate	3°C / min	3°C / min
Cooling system	Mechanical compression refrigeration system	Mechanical compression refrigeration system
Refrigerating unit	French TECUMSEH compressor	French TECUMSEH compressor
Refrigerant	R404A, R23	R404A, R23
Heating Element	Nichrome heater	Nichrome heater
Controller	Programmable color LCD touch screen controller Ethernet connection, PC Link	Programmable color LCD touch screen controller Ethernet connection, PC Link
Water supply system	Automatic water supply Water purification system	Automatic water supply Water purification system
Humidifier	External isolation, stainless steel surface evaporation humidifier	External isolation, stainless steel surface evaporation humidifier
Dehumidification	Evaporator	Evaporator
Temperature Sensor	PTR Platinum Resistance PT100 Ω/MV A-class, accuracy 0.001°C	PTR Platinum Resistance PT100 Ω/MV A-class, accuracy 0.001°C

# Drug Stability Test Chamber LDST-A2 Series

Humidity Sensor	Dry and wet bulb sensor	Dry and wet bulb sensor
Build-in Water Tank	270 × 300 × 450 mm	270 × 300 × 450 mm
View Window Size	300 × 330 mm	300 × 330 mm
Air Circulation	Centrifugal wind fan	Centrifugal wind fan
Exterior Material	Steel Plate with protective coating	Steel Plate with protective coating
Interior Material	SUS304 stainless steel	SUS304 stainless steel
Thermal Insulation	Polyurethane foam and insulation cotton	Polyurethane foam and insulation cotton
Observation Window	Interior lighting, double-layer thermo stability silicone rubber sealing	Interior lighting, double-layer thermo stability silicone rubber sealing
Standard Configuration	1 Cable hole (Φ 50,) with plug; 2 shelves	1 Cable hole (Φ 50,) with plug; 2 shelves
Maximum Noise	65 d BA	65 d BA
Ambient Temperature	5°C to +35°C	5°C to +35°C
Relative Humidity	≤ 85% RH	≤ 85% RH
Internal Dimension	700 × 800 × 900 mm	800 × 1000 × 1000 mm
External dimension	1180 × 1350 × 2010 mm	1280 × 1550 × 2110 mm
Power Supply	220 V, 50 Hz / 380 V, 50 Hz	220 V, 50 Hz / 380 V, 50 Hz
Net weight	515 kg	550 kg
Gross weight	550 kg	600 kg



Model	LDST-A24
Interior Volume	1000 L
Heat load	1000 W
Temperature Range	0°C to 100°C
Temperature Deviation in time	± 2.0°C
Temperature Fluctuation	± 0.5°C
Humidity Range	20% to 98% RH
Humidity Deviation in time	± 2.5% RH
Cooling Rate	1°C / min
Heating Rate	3°C / min
Cooling system	Mechanical compression refrigeration system
Refrigerating unit	French TECUMSEH compressor
Refrigerant	R404A, R23
Heating Element	Nichrome heater
Controller	Programmable color LCD touch screen controller Ethernet connection, PC Link
Water supply system	Automatic water supply Water purification system
Humidifier	External isolation, stainless steel surface evaporation humidifier
Dehumidification	Evaporator
Temperature Sensor	PTR Platinum Resistance PT100 Ω/MV A-class, accuracy 0.001°C
Humidity Sensor	Dry and wet bulb sensor
Build-in Water Tank	270 × 300 × 450 mm
View Window Size	300 × 370 mm
Air Circulation	Centrifugal wind fan
Exterior Material	Steel Plate with protective coating
Interior Material	SUS304 stainless steel

Thermal Insulation	Polyurethane foam and insulation cotton
Observation Window	Interior lighting, double-layer thermo stability silicone rubber sealing
Standard Configuration	1 Cable hole ( $\Phi$ 50,) with plug; 2 shelves
Maximum Noise	65 d BA
Ambient Temperature	5°C to +35°C
Relative Humidity	$\leq$ 85% RH
Internal Dimension	1000 × 1000 × 1000 mm
External dimension	1500 × 1550 × 2110 mm
Power Supply	220 V, 50 Hz / 380 V, 50 Hz
Net weight	570 kg
Gross weight	630 kg