



**ENVIRONMENTAL  
CHAMBER**

## Environmental Chamber LEC-100 series

Labocon Environmental Chamber LEC-100 Series features advanced microprocessor regulation for precise temperature and humidity control. The rugged construction, durable shelving for long life and additional broad range of options helps you to conduct appropriate environmental tests on different types of materials and products. It is a perfect growth partner in drug stability studies, tissue cultivation, shelf life testing for packaged products and other large-scale biological research.

### Features:

- Stainless steel SUS304 inner chamber and cold rolled steel plate with electrostatic powder spraying exterior
- Door with non-condensation observation window and illumination
- Silicon rubber material ensures tight sealing and prevents heat loss
- Heat insulation: PU FOAM + Glass fibre cotton material
- Test hole with a diameter of 1 set x 50 mm
- Forced cold-air circulation system with low-noise axial flow and centrifugal fan ensures the temperature uniformity
- Air cooling system
- Digital Controller with fix running mode
- Refrigerant: CFC free R404A
- High quality hermetic compressor: Low energy consumption, low noise level and low heat dissipation
- Brazed plate heat exchangers (BHEs) offers highest heat transfer performance
- Warped type evaporator
- Noise level:  $\leq 65$  dB
- Castors: 4 units for easy handling
- Safety features:
  - Over-temperature, Over-current, Electric leakage, Power phase, Fuse, Ground, and Water shortage Protection
  - Over-pressure, Over-heating, Over-current protection for compressor

### Application:

Labocon Environmental Chamber is used in testing the effects of specified environmental conditions on industrial products, materials, electronic devices and components and also in medical and research laboratories.



## Environmental Chamber LEC-100 series

### Specification:

Model	LEC-101	LEC-102	LEC-103
Capacity	49.9 L	99.7 L	148 L
Temp. Range	0-65°C		
Temp. Accuracy	±1°C		
Temp. Uniformity	±2.0°C		
Temp. Fluctuation	±0.5°C		
Temp. Resolution	0.1°C		
Humidity Range	30-95 %RH		
Humidity Uniformity	±2.0 %RH		
Humidity Fluctuation	±2.0 %RH		
Heating Rate	2-3°C/min		
Cooling Rate	1-2°C/min		
Temp. Sensor	Pt 100Ω		
Humidity Sensor	Dry and wet bulb sensor		
Timer Range	1~9999minutes		
Shelves	2		3
Load per Shelf	15 kg		
Inner Dimension	370x270x500 mm	380x350x750 mm	500x370x800 mm
Overall Dimension	640×395×1235 mm	650×475×1485 mm	770×495×1535 mm
Power	400 W	500 W	500 W
Power Supply	220 V, 60 Hz		
Weight (Net/Gross)	79/85 kg	99/105 kg	119/125 kg
Catalog No.	9441101485	9441102485	9441103485

Model	LEC-104	LEC-105	LEC-106
Capacity	200.4 L	269.2 L	300.9 L
Temp. Range	0-65°C		
Temp. Accuracy	±1°C		
Temp. Uniformity	±2.0°C		
Temp. Fluctuation	±0.5°C		
Temp. Resolution	0.1°C		
Humidity Range	30-95 %RH		
Humidity Uniformity	±2.0 %RH		
Humidity Fluctuation	±2.0 %RH		
Heating Rate	2-3°C/min		
Cooling Rate	1-2°C/min		
Temp. Sensor	Pt 100Ω		
Humidity Sensor	Dry and wet bulb sensor		
Timer Range	1~9999minutes		
Shelves	3		
Load per Shelf	15 kg		
Inner Dimension	495x450x900 mm	550x445x1100 mm	535x450x1250 mm
Overall Dimension	765×575×1635 mm	820×570×1835 mm	805×575×1985 mm
Power	600 W	680 W	800 W
Power Supply	220 V, 60 Hz		
Weight (Net/Gross)	139/145 kg	164/170 kg	184/190 kg
Catalog No.	9441104485	9441105485	9441106485

## Environmental Chamber LEC-100 series

### Specification:

Model	LEC-107	LEC-108
Capacity	351 L	399.3 L
Temp. Range	0-65°C	
Temp. Accuracy	±1°C	
Temp. Uniformity	±2.0°C	
Temp. Fluctuation	±0.5°C	
Temp. Resolution	0.1°C	
Humidity Range	30-95 %RH	
Humidity Uniformity	±2.0 %RH	
Humidity Fluctuation	±2.0 %RH	
Heating Rate	2-3°C/min	
Cooling Rate	1-2°C/min	
Temp. Sensor	Pt 100Ω	
Humidity Sensor	Dry and wet bulb sensor	
Timer Range	1~9999minutes	
Shelves	3	4
Load per Shelf	15 kg	
Inner Dimension	540x500x1300 mm	580x510x1350 mm
Overall Dimension	810×625×2035 mm	850×635×2085 mm
Power	900 W	1000 W
Power Supply	220 V, 60 Hz	
Weight (Net/Gross)	204/210 kg	224/230 kg
Catalog No.	9441107485	9441108485

Model	LEC-109	LEC-110
Capacity	450.4 L	500 L
Temp. Range	0-65°C	
Temp. Accuracy	±1°C	
Temp. Uniformity	±2.0°C	
Temp. Fluctuation	±0.5°C	
Temp. Resolution	0.1°C	
Humidity Range	30-95 %RH	
Humidity Uniformity	±2.0 %RH	
Humidity Fluctuation	±2.0 %RH	
Heating Rate	2-3°C/min	
Cooling Rate	1-2°C/min	
Temp. Sensor	Pt 100Ω	
Humidity Sensor	Dry and wet bulb sensor	
Timer Range	1~9999minutes	
Shelves	4	
Load per Shelf	15 kg	
Inner Dimension	585x550x1400 mm	605x570x1450 mm
Overall Dimension	855×675×2135 mm	875×695×2185 mm
Power	1100 W	1200 W
Power Supply	220 V, 60 Hz	
Weight (Net/Gross)	244/250 kg	264/270 kg
Catalog No.	9441109485	9441110485

## Environmental Chamber LEC-200 series

Labocon Environmental Chamber LEC-200 Series features advanced microprocessor regulation for precise temperature and humidity control. The rugged construction, durable shelving for long life and additional broad range of options helps you to conduct appropriate environmental tests on different types of materials and products. It is a perfect growth partner in drug stability studies, tissue cultivation, shelf life testing for packaged products and other large-scale biological research.

### Features:

- Mirror finished stainless steel interior and cold-rolling steel with static spray plastics exterior
- Door with double-type observation window
- Magnetic door seal strips made of nanophase and heat preservation material
- Test holes are equipped on both sides with internal diameter of 30mm and external diameter of 60mm
- Forced air circulation system and unique air duct design ensures temperature precision and uniformity
- Humidity sensor, humidifies by finned heating tube and large capacity water tank
- Microcomputer intelligent control with LCD screen display for temperature and time
- Environment efficient, energy-saving CFC-free refrigerant
- Durable refrigeration system with multiple, self-checking, auto-defrosting and safe operation avoids temperature influence
- Audio visual alarm for water level control and over temperature control
- Data can be stored and recovered on power or system failure
- RS485 interface
- Optional
  - Adjustable shelves
  - Preset function

### Application:

Labocon Environmental Chamber is used in testing the effects of specified environmental conditions on industrial products, materials, electronic devices and components and also in medical and research laboratories.



## Environmental Chamber LEC-200 series

### Specification:

Model	LEC-201	LEC-202	LEC-203	LEC-204
Capacity	150 L	250 L	400 L	800 L
Temp. Range	0-65°C			
Temp. Accuracy	±1°C			
Temp. Uniformity	±1°C			
Temp. Fluctuation	±0.5°C			
Temp. Resolution	0.1°C			
Humidity Range	60-90 %RH			
Humidity Uniformity	±2.0 %RH			
Humidity Fluctuation	±5 %RH			
Heating Rate	0.8°C /min			
Cooling Rate	0.8°C /min			
Temp. Sensor	Pt 100Ω			
Humidity Sensor	Dry and wet bulb sensor			
Timer Range	0-9999 min			
Shelves	3	4		6
Load per Shelf	15 kg			
Inner Dimension	510x390x760 mm	510x450x1100 mm	600x640x1050 mm	1220x585x1123 mm
Overall Dimension	650x680x1400 mm	650x740x1736 mm	745x930x1695 mm	1503x896x1838 mm
Power	1080 W	1100 W	1350 W	3740 W
Power Supply	220 V, 60 Hz			
Weight (Net/Gross)	105/133 kg	144/171 kg	175/250 kg	317/375 kg
Catalog No.	9441111127	9441112127	9441113127	9441114127



## Environmental Chamber LEC-300 series

Labocon Environmental Chamber LEC-300 Series features advanced microprocessor regulation for precise temperature and humidity control. The rugged construction, durable shelving for long life and additional broad range of options helps you to conduct appropriate environmental tests on different types of materials and products. It is a perfect growth partner in drug stability studies, tissue cultivation, shelf life testing for packaged products and other large-scale biological research.

### Features:

- Inner chamber made up of 1.5 mm thick Stainless Steel SUS304 and cold rolled steel plate with electrostatic powder spraying exterior
- Insulating material: PU FOAM and Glass fibre cotton prevents heat loss
- Silicon rubber ensures tight sealing
- Non-condensation observation window with illumination
- Stainless steel test hole of 2 sets × 100 mm diameter
- Forced cold-air circulation system with low-noise axial flow and centrifugal fan ensures temperature uniformity
- Air cooling system
- PLC touch screen controller with fix program setting
- 100 groups program / 120 sections controller capacity
- PID and SSR type humidity control system
- Refrigerant type: R404A/R23
- Refrigerator oil: 3GS/32H
- High quality hermetic compressor: Low energy consumption, low noise level and low heat dissipation
- Brazed plate heat exchangers (BHEs) offers highest heat transfer performance
- Warped type evaporator
- Castors: 4 units for easy handling
- Noise level: ≤65 dB
- Safety features:
  - Over-temperature, Over-current, Electric leakage, Power phase, Fuse, Ground, and Water shortage Protection
  - Over-pressure, Over-heating, Over-current protection for compressor
- Optional:
  - PLC touch screen temperature controller (5.7 inch color)
  - PLC touch screen temperature controller (7.0 inch color)
  - Shelf
  - USB Port
  - Glove Door

### Application:

Labocon Environmental Chamber is used in testing the effects of specified environmental conditions on industrial products, materials, electronic devices and components and also in medical and research laboratories.

## Environmental Chamber LEC-300 series

### Specification:

Model	LEC-301	LEC302	LEC-303	LEC-304
Capacity	50.4 L	101.2 L	225 L	352.8 L
Temp. Range	-20-180°C			
Temp. Accuracy	±1°C			
Temp. Uniformity	±2.0°C			
Temp. Fluctuation	±0.5°C			
Temp. Resolution	0.1°C			
Humidity Range	20-98 %RH			
Humidity Uniformity	±2.0 %RH			
Humidity Fluctuation	±2.0 %RH			
Heating Rate	2-3°C/min			
Cooling Rate	1-2°C/min			
Temp. Sensor	Pt 100Ω			
Humidity Sensor	Capacitive Humidity Sensor			
Timer Range	1~9999minutes			
Shelves	2			
Load per Shelf	15 kg			
Inner Dimension	350x360x400 mm	450x450x500 mm	500x600x750 mm	630x700x800 mm
Overall Dimension	570x470x1600mm	950x850x1500 mm	1000x1000x1750 mm	1130x1100x1800 mm
Power	2000 W	2500 W	3000 W	3800 W
Power Supply	220 V, 60 Hz			
Weight (Net/Gross)	170/180kg	200/210 kg	260/270 kg	300/310 kg
Catalog No.	9441115485	9441116485	9441117485	9441118485

Model	LEC-305	LEC-306	LEC-307
Capacity	504 L	800 L	1000 L
Temp. Range	-20-180°Cc		
Temp. Accuracy	±1°C		
Temp. Uniformity	±2.0°C		
Temp. Fluctuation	±0.5°C		
Temp. Resolution	0.1°C		
Humidity Range	20-98 %RH		
Humidity Uniformity	±2.0 %RH		
Humidity Fluctuation	±2.0 %RH		
Heating Rate	2-3°C/min		
Cooling Rate	1-2°C/min		
Temp. Sensor	Pt 100Ω		
Humidity Sensor	Capacitive Humidity Sensor		
Timer Range	1~9999minutes		
Shelves	2		
Load per Shelf	15 kg		
Inner Dimension	800x700x900 mm	800x1000x1000 mm	1000x1000x1000 mm
Overall Dimension	1300x1100x1900 mm	1300x1400x2000 mm	1400x1400x2000 mm
Power	3500 W	4000 W	4800 W
Power Supply	220 V, 60 Hz		
Weight (Net/Gross)	350/360 kg	490/500 kg	520/530 kg
Catalog No.	9441119485	9441120485	9441121485



## Environmental Chamber LEC-400 series

Labocon Environmental Chamber LEC-400 Series features advanced microprocessor regulation for precise temperature and humidity control. The rugged construction, durable shelving for long life and additional broad range of options helps you to conduct appropriate environmental tests on different types of materials and products. It is a perfect growth partner in drug stability studies, tissue cultivation, shelf life testing for packaged products and other large-scale biological research.

### Features:

- Inner chamber made up of 1.5 mmthick Stainless Steel SUS304 and cold rolled steel plate with electrostatic powder spraying exterior
- Insulating material: PU FOAM and Glass fibre cotton prevents heat loss
- Silicon rubber which ensures tight sealing
- Non-condensation observation window with illumination
- Stainless steel test hole of 2 sets × 100 mm diameter
- Forced cold-air circulation system with low-noise axial flow and centrifugal fan ensures the temperature uniformity
- Air cooling system
- PLC touch screen controller with fix program setting
- 100 groups program / 120 sections controller capacity
- PID and SSR type humidity control system
- Refrigerant type: R404A/R23
- Refrigerator oil: 3GS/32H
- High quality hermetic compressor: Low energy consumption, low noise level and low heat dissipation
- Brazed plate heat exchangers (BHEs) offers highest heat transfer performance
- Warped type evaporator
- Noise level ≤ 65 dB
- Castors: 4 units for easy handling
- Safety features:
  - Over-temperature, Over-current, Electric leakage, Power phase, Fuse, Ground, and Water shortage Protection
  - Over-pressure, Over-heating, Over-current protection for compressor
- Optional:
  - PLC touch screen temperature controller (5.7 inch color)
  - PLC touch screen temperature controller (7.0 inch color)
  - Shelf
  - USB Port
  - Glove Door

### Application:

Labocon Environmental Chamber is used in testing the effects of specified environmental conditions on industrial products, materials, electronic devices and components and also in medical and research laboratories.

## Environmental Chamber LEC-400 series

### Specification:

Model	LEC-401	LEC-402	LEC-403	LEC-404
Capacity	50.4 L	101.2 L	225 L	352.8 L
Temp. Range	-40-180°C			
Temp. Accuracy	±1°C			
Temp. Uniformity	±2.0°C			
Temp. Fluctuation	±0.5°C			
Temp. Resolution	0.1°C			
Humidity Range	20-98 %RH			
Humidity Uniformity	±2.0 %RH			
Humidity Fluctuation	±2.0 %RH			
Heating Rate	2-3°C/min			
Cooling Rate	1-2°C/min			
Temp. Sensor	Pt 100Ω			
Humidity Sensor	Capacitive Humidity Sensor			
Timer Range	1~9999minutes			
Shelves	2			
Load per Shelf	15 kg			
Inner Dimension	350x360x400 mm	450x450x500 mm	500x600x750 mm	630x700x800 mm
Overall Dimension	580×550×1850 mm	950×850×1500 mm	1000×1000×1750 mm	1130×1100×1800 mm
Power	3000 W	4000 W	5000 W	5500 W
Power Supply	220 V, 60 Hz			
Weight (Net/Gross)	170/180kg	200/210 kg	260/270 kg	300/310 kg
Catalog No.	9441122485	9441123485	9441124485	9441125485

Model	LEC-405	LEC-406	LEC-407
Capacity	504 L	800 L	1000 L
Temp. Range	-40-180°C		
Temp. Accuracy	±1°C		
Temp. Uniformity	±2.0°C		
Temp. Fluctuation	±0.5°C		
Temp. Resolution	0.1°C		
Humidity Range	20-98 %RH		
Humidity Uniformity	±2.0 %RH		
Humidity Fluctuation	±2.0 %RH		
Heating Rate	2-3°C/min		
Cooling Rate	1-2°C/min		
Temp. Sensor	Pt 100Ω		
Humidity Sensor	Capacitive Humidity Sensor		
Timer Range	1~9999minutes		
Shelves	2		
Load per Shelf	15 kg		
Inner Dimension	800x700x900 mm	800x1000x1000 mm	1000x1000x1000 mm
Overall Dimension	1300×1100×1900 mm	1300×1400×2000 mm	1400×1400×2000 mm
Power	5000 W	6000 W	6500 W
Power Supply	220 V, 60 Hz		
Weight (Net/Gross)	350/360 kg	490/500 kg	520/530 kg
Catalog No.	9441126485	9441127485	9441128485

## Environmental Chamber LEC-500 series

Labocon Environmental Chamber LEC-500 Series features advanced microprocessor regulation for precise temperature and humidity control. The rugged construction, durable shelving for long life and additional broad range of options helps you to conduct appropriate environmental tests on different types of materials and products. It is a perfect growth partner in drug stability studies, tissue cultivation, shelf life testing for packaged products and other large-scale biological research.

### Features:

- Inner chamber made up of 1.5 mm thick Stainless Steel SUS304 and cold rolled steel plate with electrostatic powder spraying exterior
- Silicon rubber which ensures tight sealing
- Insulating material: PU FOAM and Glass fibre cotton prevents heat loss
- Non-condensation observation window with illumination
- Stainless steel test hole of 2 sets × 100 mm diameter
- Forced cold-air circulation system with low-noise axial flow and centrifugal fan ensures the temperature uniformity
- Air cooling system
- PLC touch screen controller with fix program setting
- 100 groups program / 120 sections controller capacity
- PID and SSR type humidity control system
- Refrigerant type: R404A/R23
- Refrigerator oil: 3GS/32H
- High quality hermetic compressor: Low energy consumption, low noise level and low heat dissipation
- Brazed plate heat exchangers (BHEs) offers highest heat transfer performance
- Warped type evaporator
- Castors: 4 units for easy handling
- Noise level: ≤65 dB
- Safety features:
  - Over-temperature, Over-current, Electric leakage, Power phase, Fuse, Ground, and Water shortage Protection
  - Over-pressure, Over-heating, Over-current protection for compressor
- Optional:
  - PLC touch screen temperature controller (5.7 inch color)
  - PLC touch screen temperature controller (7.0 inch color)
  - Shelf
  - USB Port
  - Glove Door

### Application:

Labocon Environmental Chamber is used in testing the effects of specified environmental conditions on industrial products, materials, electronic devices and components and also in medical and research laboratories.

## Environmental Chamber LEC-500 series

### Specification:

Model	LEC-501	LEC-502	LEC-503	LEC-504
Capacity	50.4 L	101.2 L	225 L	352.8 L
Temp. Range	-70-180°C			
Temp. Accuracy	±1°C			
Temp. Uniformity	±2.0°C			
Temp. Fluctuation	±0.5°C			
Temp. Resolution	0.1°C			
Humidity Range	20-98 %RH			
Humidity Uniformity	±2.0 %RH			
Humidity Fluctuation	±2.0 %RH			
Heating Rate	2-3°C/min			
Cooling Rate	1-2°C/min			
Temp. Sensor	Pt 100Ω			
Humidity Sensor	Capacitive Humidity Sensor			
Timer Range	1~9999minutes			
Shelves	2			
Load per Shelf	15 kg			
Inner Dimension	350x360x400 mm	450x450x500 mm	500x600x750 mm	630x700x800 mm
Overall Dimension	700x570x1900 mm	950x850x1500 mm	1000x1000x1750 mm	1130x1100x1800 mm
Power	3500 W	6000 W	7000 W	7500 W
Power Supply	220 V, 60 Hz			
Weight (Net/Gross)	170/180kg	200/210 kg	260/270 kg	300/310 kg
Catalog No.	9441129485	9441130485	9441131485	9441132485

Model	LEC-405	LEC-406	LEC-407
Capacity	504 L	800 L	1000 L
Temp. Range	-70-180°C		
Temp. Accuracy	±1°C		
Temp. Uniformity	±2.0°C		
Temp. Fluctuation	±0.5°C		
Temp. Resolution	0.1°C		
Humidity Range	20-98 %RH		
Humidity Uniformity	±2.0 %RH		
Humidity Fluctuation	±2.0 %RH		
Heating Rate	2-3°C/min		
Cooling Rate	1-2°C/min		
Temp. Sensor	Pt 100Ω		
Humidity Sensor	Capacitive Humidity Sensor		
Timer Range	1~9999minutes		
Shelves	2		
Load per Shelf	15 kg		
Inner Dimension	800x700x900 mm	800x1000x1000 mm	1000x1000x1000 mm
Overall Dimension	1300x1100x1900 mm	1300x1400x2000 mm	1400x1400x2000 mm
Power	7000 W	8000 W	8500 W
Power Supply	220 V, 60 Hz		
Weight (Net/Gross)	350/360 kg	490/500 kg	520/530 kg
Catalog No.	9441133485	9441134485	9441135485



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