

Climate Chamber/ Light Chamber

---Precision temperature humidity control, 3d lighting
Perfect environment simulation expert

RG/LC SERIES

RG-250 LC-250

RG-300 LC-300

RG-400 LC-400



Gather all the essence of Kenton technology, Together with researchers

Perfect products from KENTON--- Human engineering design. Intelligent PID microcomputer control system, precision temperature humidity control and 3D lighting technology, famous brand components, as well as advanced manufacturing technology of international, ensure your successful experiment.



RG Climate Chamber, LC Light chamber

Technical Parameters

Product model	RG Climate Chamber			LC Light chamber		
	RG-250	RG-300	RG-400	LC-250	LC-300	LC-400
Convection Mode	Forced Convection					
Control System	Programmable segmented microcomputer PID intelligent touch screen control system					
Temp. range	10~65℃(with lighting)/0~60℃(without lighting)					
Temp. Accuracy	0.1					
Temp. Fluctuation (10-40℃)	±0.5					
Temp. Uniformity (10-40℃)	±1					
Humidity Range	Humidity Range: 50~90%RH, Humidity Fluctuation: ±3%RH					
Illumination Range	0~15000 (five stages adjustable)					
Timer Range	0~999 Hours, 0~9999 minutes					

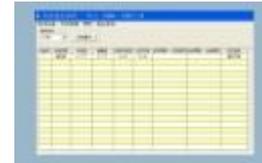
Working environment	Ambient temperature: 10~30℃, Humidity<70%					
Insulation materials	environmental protection type material					
External Dimensions (H×W×D)	1780×710× 775	1780×770× 815	1828×783× 905	1780×710× 775	1780×770× 815	1828×783× 905
Internal Dimensions (H×W×D)	1100×480× 480	1100×540× 520	1148×554× 610	1100×480× 480	1100×540× 520	1148×554× 610
Interior Volume(L)	250	300	400	250	300	400
Liner materials	SUS304 stainless steel / 4 shelves					
Shelf load/Total load	Each shelf load 25 kg and the inner total load 90 kg					
Power Consumption	1350W	1350W	1550W	1350W	1350W	1550W
Power supply	AC220V/50Hz					
Net Weight(KG)	162	183	194	162	183	194
Shipping Weight(KG)	172	198	214	172	198	214
Shipping Dimensions(H×W×D)	1965×800× 900	1965×860× 940	2017×880× 1060	1965×800× 900	1965×860× 940	2017×880× 1060

Optional Product Accessories

1. Portable printer
2. Data memory with USB interface
3. Gas interface, test hole
4. Built-in universal power interface
5. ALLSENS™ software
6. Adjustable shelf lighting
7. Different light emitting spectral tubes
8. SUS304 stainless steel perforated sheet
9. Power off the door open
USB



Portable printer



ALLSENS™ software



Test hole



Data memory with
USB

All technical data is under no load conditions, environment temperature 25 °C, relative humidity 50%RH, voltage fluctuation $\pm 10\%$, no obvious shock and dust.

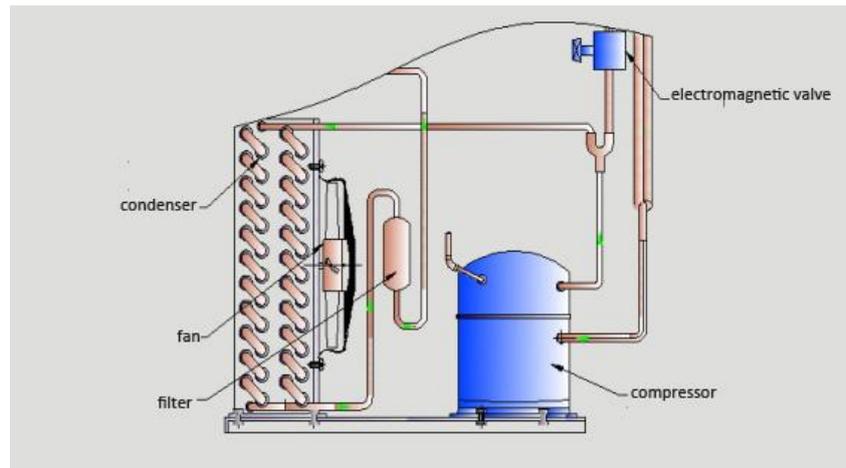
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RG Climate Chamber/ LC Light Chamber **3 years warranty**

- Widely used in biological tissue, cell culture, seed germination, plant cultivation, animal and insect feeding
- RG Climate Simulation Chamber、LC Lighting Incubator can simulate day and night illumination change and climatic conditions, to meet the multi-segment ladder programming control.
- Balanced dual-mode control heating and cooling, effectively reduce temperature fluctuations, programmable segmented control of temperature humidity LCD display touch screen, standard RS485 interface can be connected to multiple devices, and monitoring, with ALLSENS software for remote control.
- SUS304 stainless steel liner features engineered Pro-Bright lighting system that replicates natural daylight patterns throughout the day and night. The precision control system automatically compensates for heat generated by illumination, maintaining constant temperature. With 3D light sources ensuring uniform distribution, the mirrored stainless steel surface of the liner acts as a reflective medium, delivering perfectly even illumination.
- According to global pharmacopoeia requirements, AS3100 of Australia, FDA of the United States, EN, ICH and other related standards. For long-term acceleration experiments and forced degradation experiments.
- IQ、OQ、PQ and other related certification services.
- CE certification. 3-year warranty period.

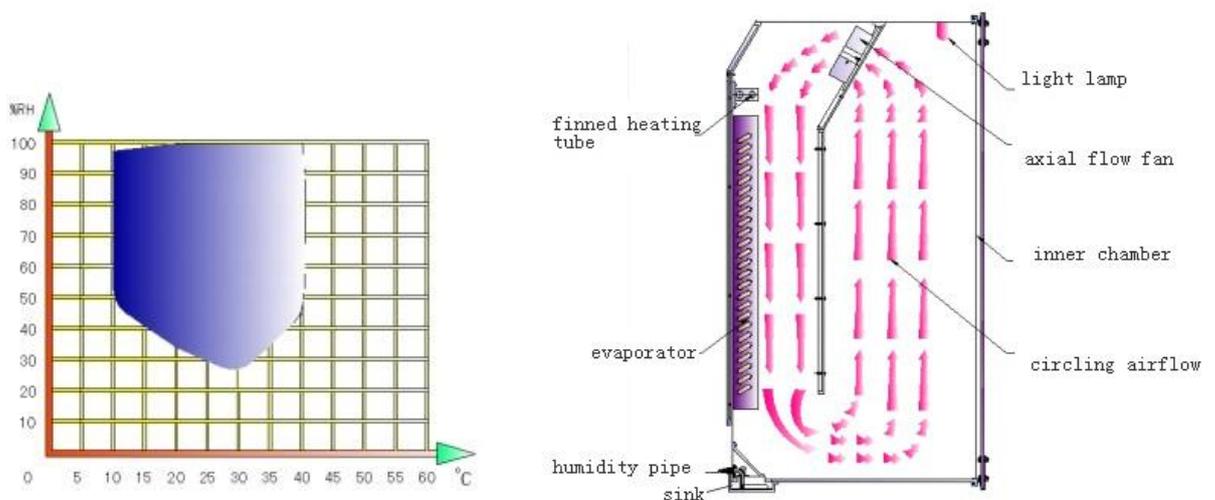
ALLCOLD Refrigeration Technology

- World famous compressor: balanced refrigeration technology, auto defrost, multiple security system, long time running, environmental protection, high efficiency and energy saving.
- Auto-defrost function: original rapid heat pump defrost technology, for continuous operation, effectively prevent frost because of continuous operation of evaporator.
- Environmental refrigerant. For cleaner world, for better work condition. To save energy, to reduce the cost.



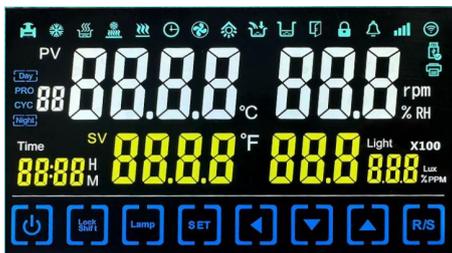
ALLFLOW Perfect Air Duct Cycling

- ALLFLOW air current cycling: perfect forced convection, maximum samples number of working room, minimum temperature recovery time after the opening, world famous axial fan, perfect air current design, ensure an ideal result of samples culture.
- ALLFLOW air current cycling: keep temperature continuous and stable, keep humidity continuous and stable, ensure perfect sample culture environment.

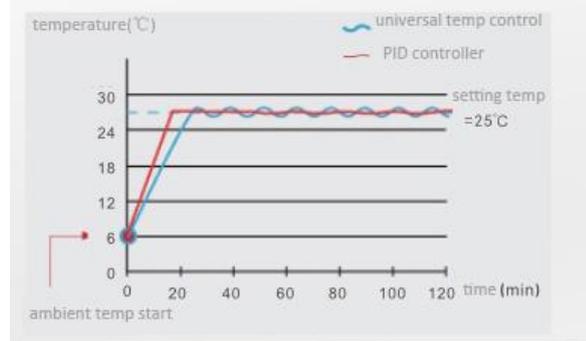


ALLSENS Programmable PID Control

- Programmable segmented control temperature humidity LCD display touch screen, Full display of customer required status display: temperature, humidity, light level, cycle, number of periods, running time, running stop.
- PID control, precise control of temperature and humidity, prevent temperature overshoot, maintain uniform and constant temperature in the chamber.
- Built-in multi-function memory menu, through the standard RS485 interface can be connected to multiple devices, real-time monitoring.
- Time setting:0-999h,0-9999m,programs can be executed automatically cycles.
- Microcomputer software remote control, professional supporting ALLSENSTM software

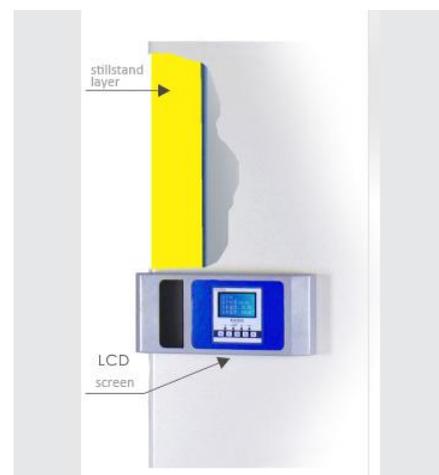


Programmable touch screen controller



Efficient Isolation Design

- Design of double-layer isolation, reduce power consumption, environmental protection concept, energy conservation.
- Internal isolated door design, easy observation of working room samples, keep temperature stability of working room.



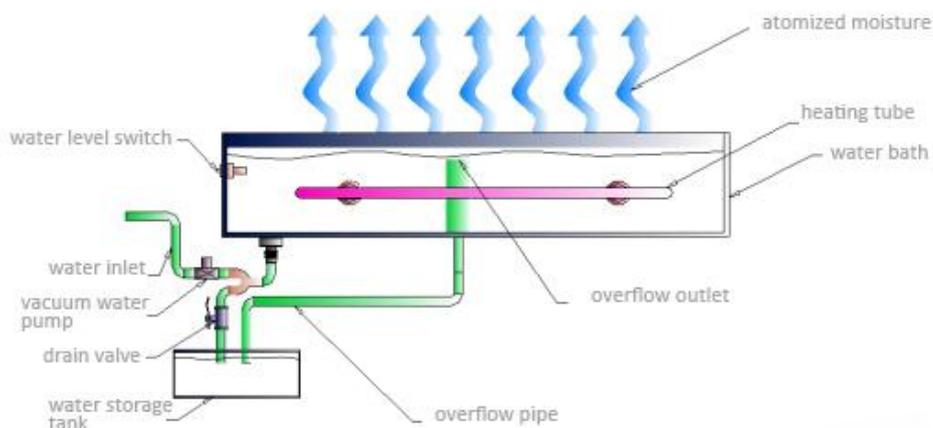
Qualified Sensor

- Industrial sensor PT100, short response time, low self-heating temperature.
- Humidity sensor, aerospace material, no maintenance, precision humidity control level.



ALLGENT Humidification System (for the RG Climate Chamber)

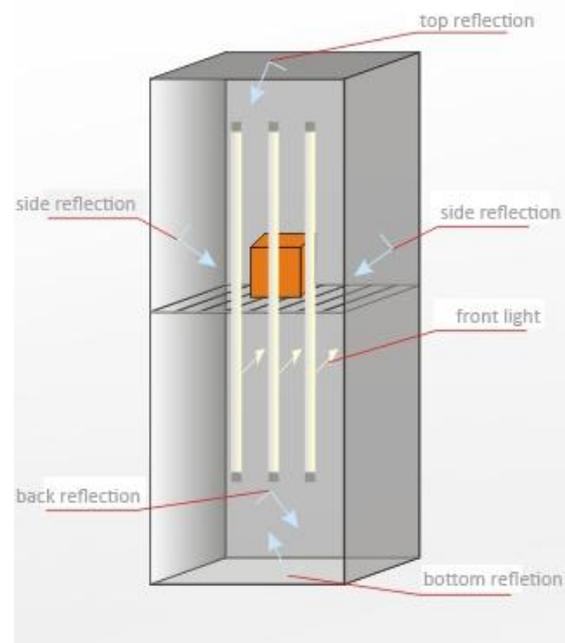
- Built-in humidification system design, get rid of the disadvantages of traditional external atomization humidifier uneven and unstable humidification, and can also meet the high humidity setting.
- Automatic water intake, automatic water level control, ensure the precision of humidity control.
- Stainless steel SUS304 internal surface and water tank, ensure the quality of atomization and uses persistent.



Pro-Bright™ Professional Lighting Systems

- Equipped with Pro-Bright™ light system in the chamber that can simulate daytime and nighttime natural light, to meet specific lighting conditions.

- Effective compensation of the heat generated by the light, through a sophisticated control system to ensure that the temperature is constant.
- 3D light source, evenly distributed lighting, use the stainless steel mirror as reflective material to make the lighting better, at the same time lighting degree can be adjust.
- Better lighting systems, tube and the chamber is effectively insulated by double glazing and a ventilation hole cooling.
- With **ALLIGENT™** humidification system (only for the Climate Chamber) provide the product a variety of climate simulations.



Ergonomic Design

- Laboratory of classical color design, international fashion design, arc-shaped design, for highest operational comfort.
- Integrated design that contains original outside handle and LCD screen, ergonomic structure, comfortable viewing angle, convenient to open the outside door and operate interface.
- Interval and number of mesh shelf can be adjusted according to customer requirements. Maximum capacity to meet customer needs.
- Comfortable vertical structure, maximize work chamber, working room in the upper, convenient to take.
- Double door design, easy observation samples, keep temperature stability, with bell-type lighting system.



Modern Manufacturing Processes

Sheet metal parts use laser cutting and CNC bending technology. Cold-rolled sheets use three line of acidification anti-rust technology, surface use workmanship of spraying plastics.



Easy to Clean

- Internal surface is smooth and less weld, easy cleaning and maintenance.
- Pull multilayer shelf design, less metal accessories, easy to clean.
- Drainage design of chamber humidification collecting tank. User can discharge water as required to avoid bacteria.

Convenient Maintenance

- Liquid crystal micro-computer controller with diagnostic function. Display operating parameters including historical record, temperature and humidity data.
- Electrical control components and working room are installed separately. Especially refrigerating battery and electrical control output parts, which are installed in incubator bottom, easy to maintenance.



Secure and Efficient Protection Concept

- Multiple over temperature protection function, sound and light alarm.
- Major electronic components can be UL certified.
- The design of temperature protection device complies with German DIN 12880 Class 3.1 standard, and the electrical safety complies with international IEC 61010-1; American UL 61010-1; European EN 61010-1 standard.

RG/LC series climate chamber main configuration

No	Name	specifications	quantity
1	Main chamber	RG/LC	1
2	LCD programmable touch screen intelligent control		1
3	temperature /humidity sensor	PT-100/Sensirio	Each 1
4	circulating fan	BT150	2
5	compressor	GQR	1
6	Stainless steel heating tube	0.65-0.75KW	1
7	304 Stainless steel inner	RG/LC	1
8	485 interface	9 hole	1
9	protective tube	10/15A	1
10	3×0.75mm ² Separate the power cord with plug	2.5m 15A	1
11	Environmentally friendly refrigerant	R290	
12	Evaporator	Kenton	1
13	Condenser	Kenton	1
14	Brake wheels	3 inch	4
15	Solenoid valve	SH1028	1
16	Water solenoid valve	G	1
17	liquid level switch	FBS	1
18	Small circuit breakers	DZ47	1
19	LED tube	T5-21W	16-21

The above configuration is for reference only. The manufacturer reserves the right to change the accessories and their parameters at any time without prior notice

Comparison of biochemical-humidity-light-climate chamber

	SH/MJ	WS/MJ	LC	RG	SPX/ MJ	LRH/ MJ	GZP	PQH
Controller								
Programmable touch screen controller	●	●	●	●			●	●
PID LCD	●	●	●	●	●	●	●	●
Chamber material								
SUS304 St.steel	●	●	●	●		●	●	●
201 St.steel					●			
Motor fan								
High temperature resistant bearing	●	●	●	●				
Heat element								
St.steel	●	●	●	●	●	●	●	●
RS232 port	●	●	●	●		●	●	●
Remote control	●	●	●	●				
ALLCOLD balanced refrigeration	●	●	●	●	●	●	●	●
ALLFLOW circulation	●	●	●	●	●	●	●	●
ALLSENS temp.control	●	●	●	●		●	●	●
ALLIGENT humidification		●		●		●		●
Pro-Bright light system			●	●			●	●
Save energy insulation	●	●	●	●				
UV function	“MJ”●	“MJ”●			“MJ”●	“MJ”●		
Refrigeration capacity control	●	●	●	●				
Brand accessories								

Brand compressor	●	●	●	●	●	●	●	●
Environmentally friendly refrigerant	●	●	●	●	●	●	●	●
ST bi type thyristor	●	●	●	●				
Philip chip	●	●	●	●				
Taiwan optical coupler	●	●	●	●				
SENSIRION sensor	●	●	●	●				
Auto defrost	●	●	●	●	●	●	●	●
Cut-off memory	●	●	●	●	●	●	●	●
Door seal material	Silicone+magnetic				magnetic	Silicone+magnetic		
insulation	High density polyurethane				polyurethane			
Temp.accuracy°C	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
Temp.fluctuation	±0.5%	±0.5%	±1%	±1%	±0.5%	±0.5%	±1-1.5%	±1-1.5%
humidification		●		●		●		●
Humidity fluctuation		±2%		±3%		±2%		±3%
Light function			●	●			●	●
timer	●	●	●	●	●	●	●	●
Over-temperature alarm	●	●	●	●	●	●	●	●
warranty	3 years				2 years			

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KENTON APPARATUS LTD.

Manufacture of drying oven, lab incubator, climate chamber, laminar flow cabinet, biological safety cabinet(OEM,ODM)

KENTON Apparatus Limited was found in 1999, production plant was set in Guangzhou,China.It is mainly engaged in production,sales and export of laboratory thermostatic equipment and biological scientific equipment,and has provided high-quality products and services for professional laboratories and scientific research .institutions at domestics and abroad for many years.

We relies on an international professional R&D team to keep the design and technology of products in step with the world and constantly seek breakthroughs.

Since its establishment, the company has been focusing on thermostatic equipment products in related fields. Now it is a high-tech enterprise integrating science, industry and trade. Its business covers China, Southeast Asia, America, Europe, Australia and other countries.

At the same time, based on the business philosophy of "walking with scientific researchers", and taking advantage of the company's geographical advantages, the company has carried out extensive communication and exchange with scientific researchers in different regions for many years, and carried out long-term follow-up services to users, constantly improving the function and quality of products, so that products can better meet the requirements of users.

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