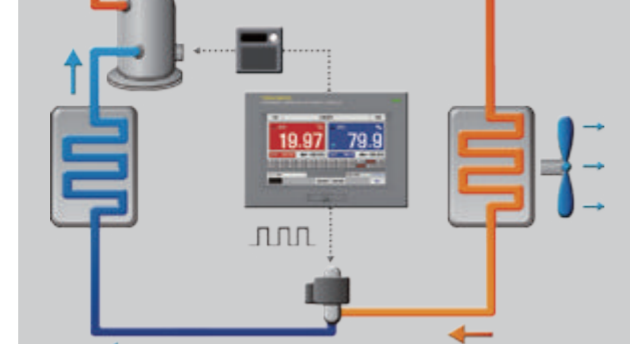


# Bench-Top Temperature & Humidity Chamber



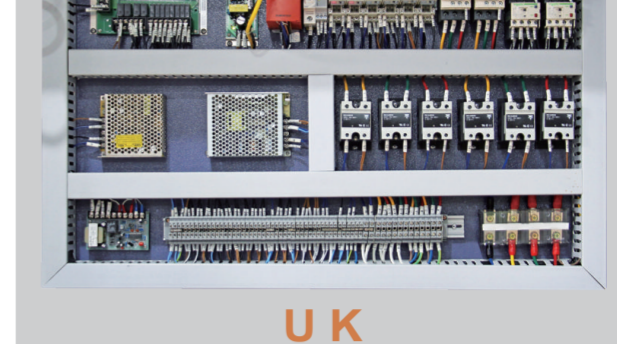
### Energy Conservation



### Remote network system



### Circuit System



U K international standard



## Bench-Top Temperature & Humidity Chamber

### Application

- Energy Conservation
- Temperature and Humidity Change Test

### Functions

- Touch
- SD Card
- RS485 RS232C Ethernet
- language
- Free PC S/W

### Special Features

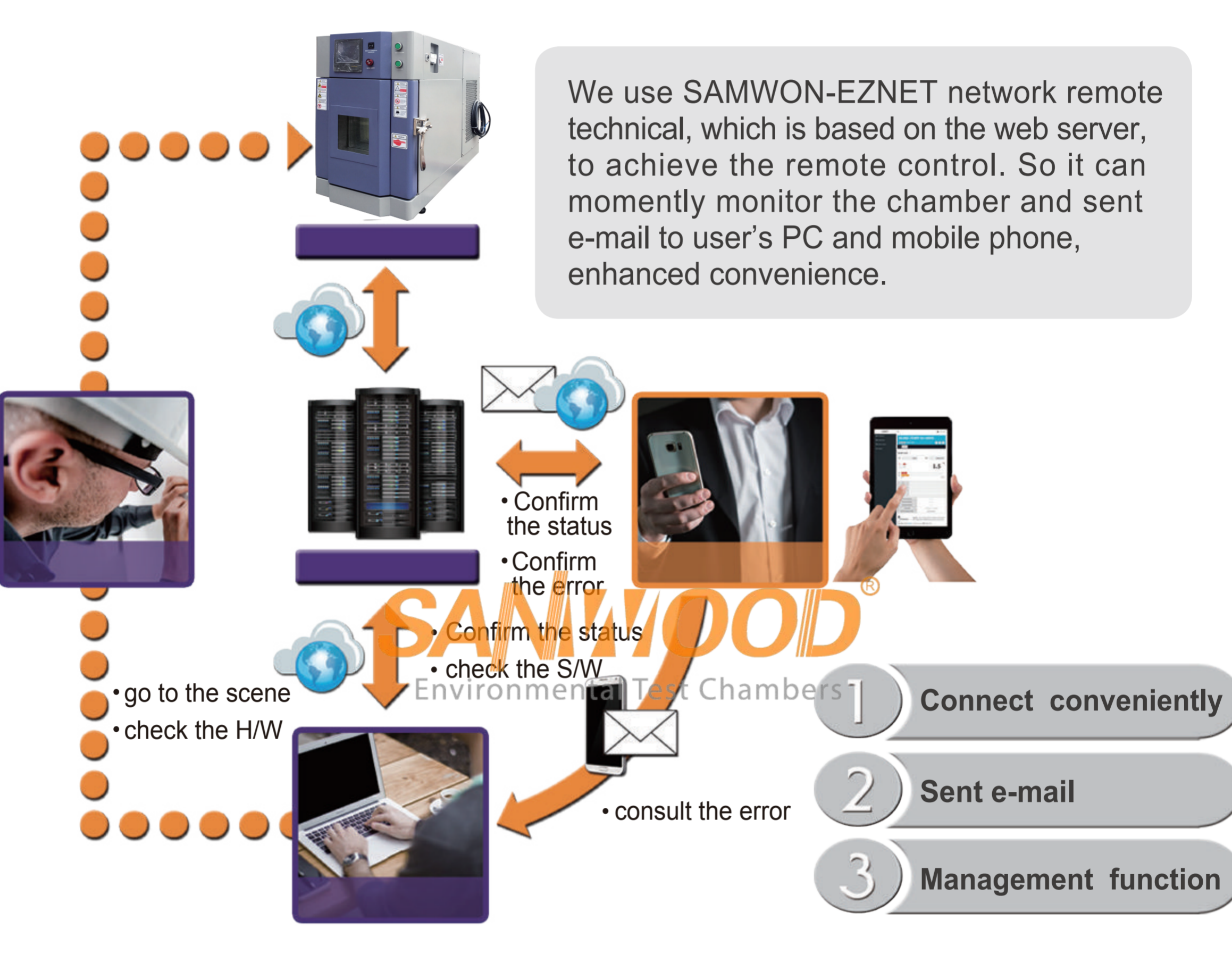
**Convenient water supply**  
The water tank located in the front side, below the door. Drawer type structure provides convenient operation, can move freely and easy to supply water.

**Dry/wet bulb sensor**  
Using wet and dry bulb sensor to control the temperature and humidity, can get the accurate test results.

**Cable port**  
On the side of the main body, a cable port for connecting the power of the sample and a connection for easy determination is mounted.

**Low-noise**  
Used BLDC motor, noise is less than 59db, it is suitable for indoor use.

### Remote network system



### Control system

**SAMS Form Korea**

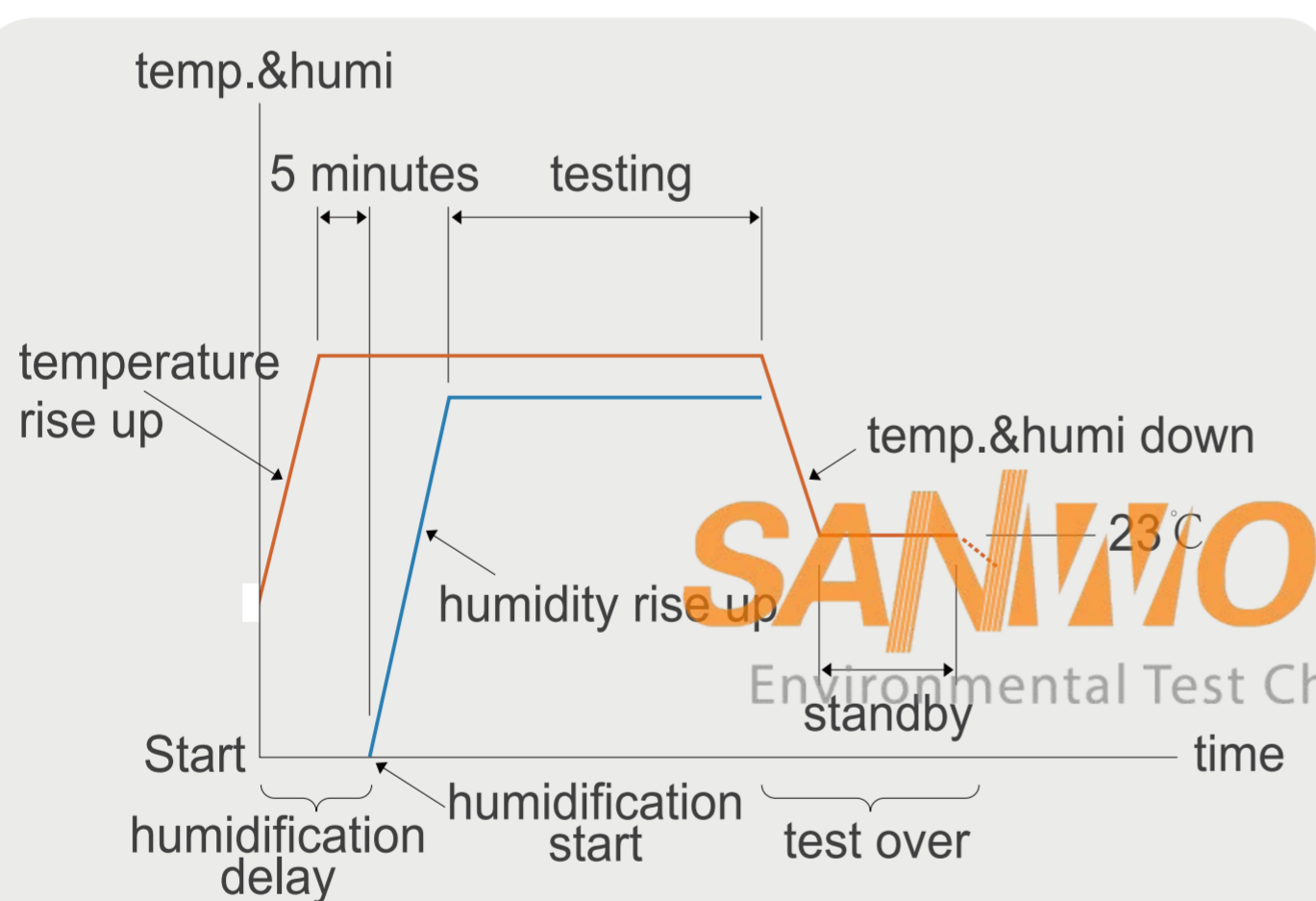
- With color touch screen 7 inch.
- With a 4G SD card for storing data.
- Communication port: RS232, RS485 and Ethernet.
- Minimum display resolution: temperature is 0.01C, humidity is 0.01%.
- Several language option : English, Korean, Russian, Chinese, and Japanese.

Based on smart phone monitoring APP of SIMS server S/W communication (Apple, SAMSUNG) SIMS server (PC Program) and Network App which can be visited by most smart phones based on product control module of smart phone (iphone)

### Energy Conservation

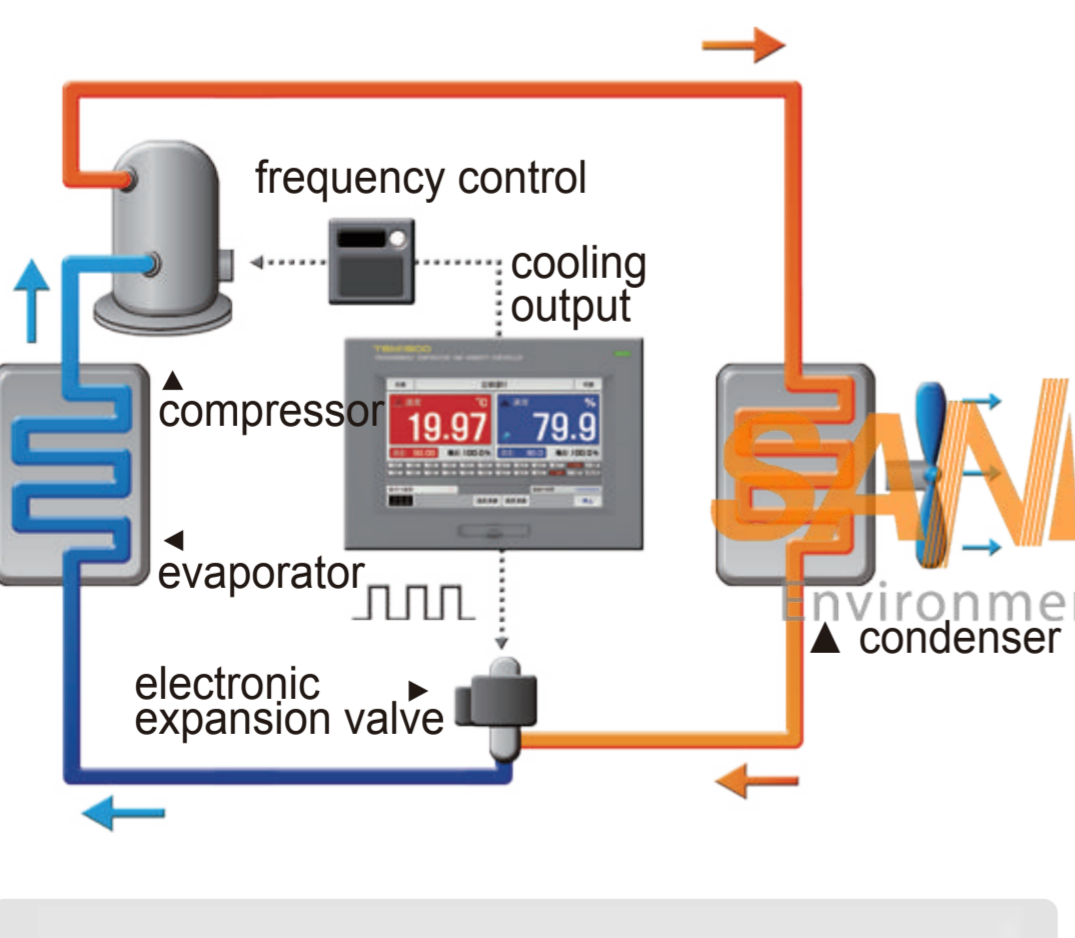
## Guarantee the sample with no condensation

The chamber has a function to prevent the condensation when the temperature and humidity rise up or have some error, to prevent damage to the sample.



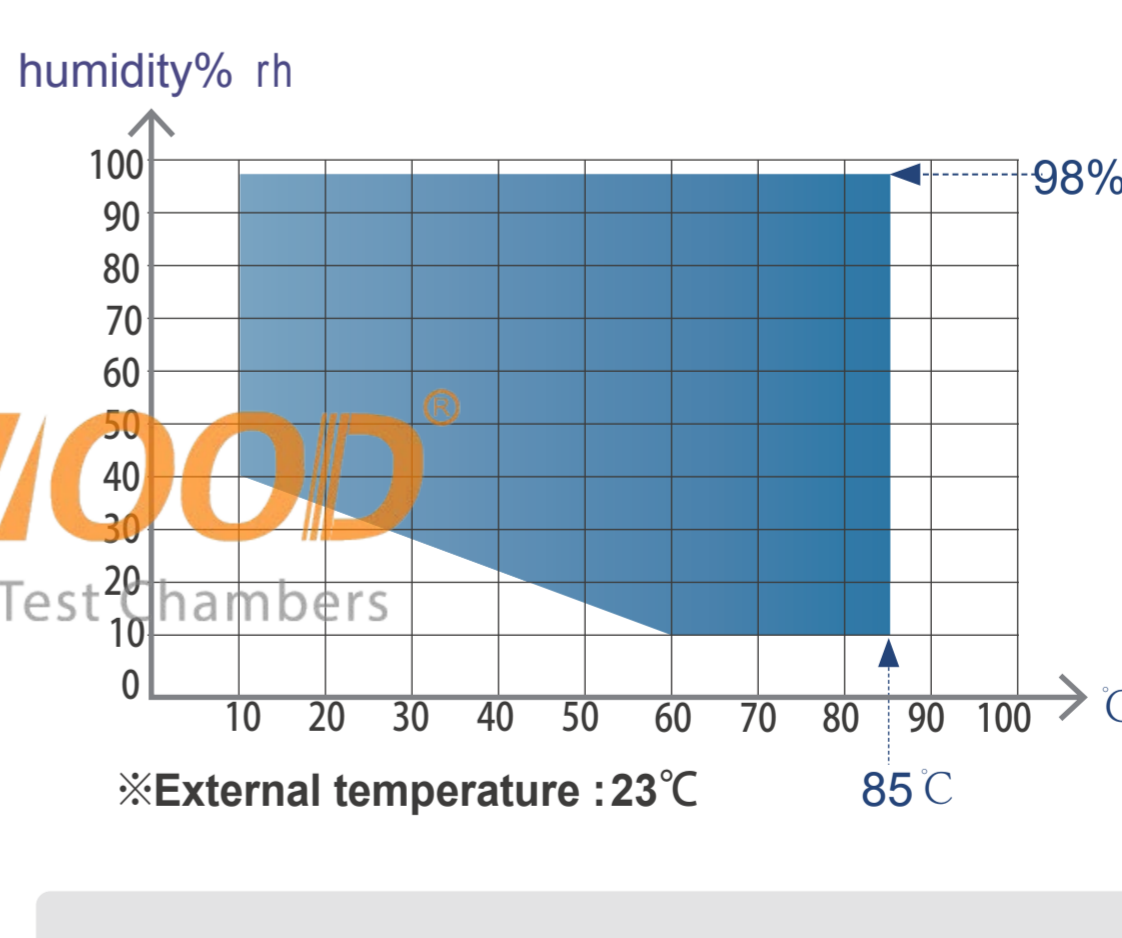
- Cut off overheating, overcurrent**  
By cutting off the overheating and over-current to protect the safety of the machine and the user.
- Service port**  
Communication and operation alarm, time signal are provided by relay contact.
- Controller**  
we used the controller TEMI 2500 form company Sanwontech, imported from South Korea.
- Cable port**  
Install the power outlet on the side of the chamber for customer power test.

### Energy Conservation



Through the controller output signal, control the frequency converter, accurately adjust the refrigerant flow, in order to achieve energy saving effect, and the cooling system will more stable. (Frequency control is optional)

### Temperature-Humidity Range Of Control



Can support the humidity from 20% to 98% in the temperature range of +10 to 85, to maximize the simulation of the atmospheric environment, can design a variety of tests.

### Optimal space use with stand options

Available in 3 different heights, with a total of 9 variations. Mid and high stands come with a shelf, an option box or a 19 inch stand. You can also select a mid-stand with build-in 18 liter water tank to supply water for extended duration of humidity testing.

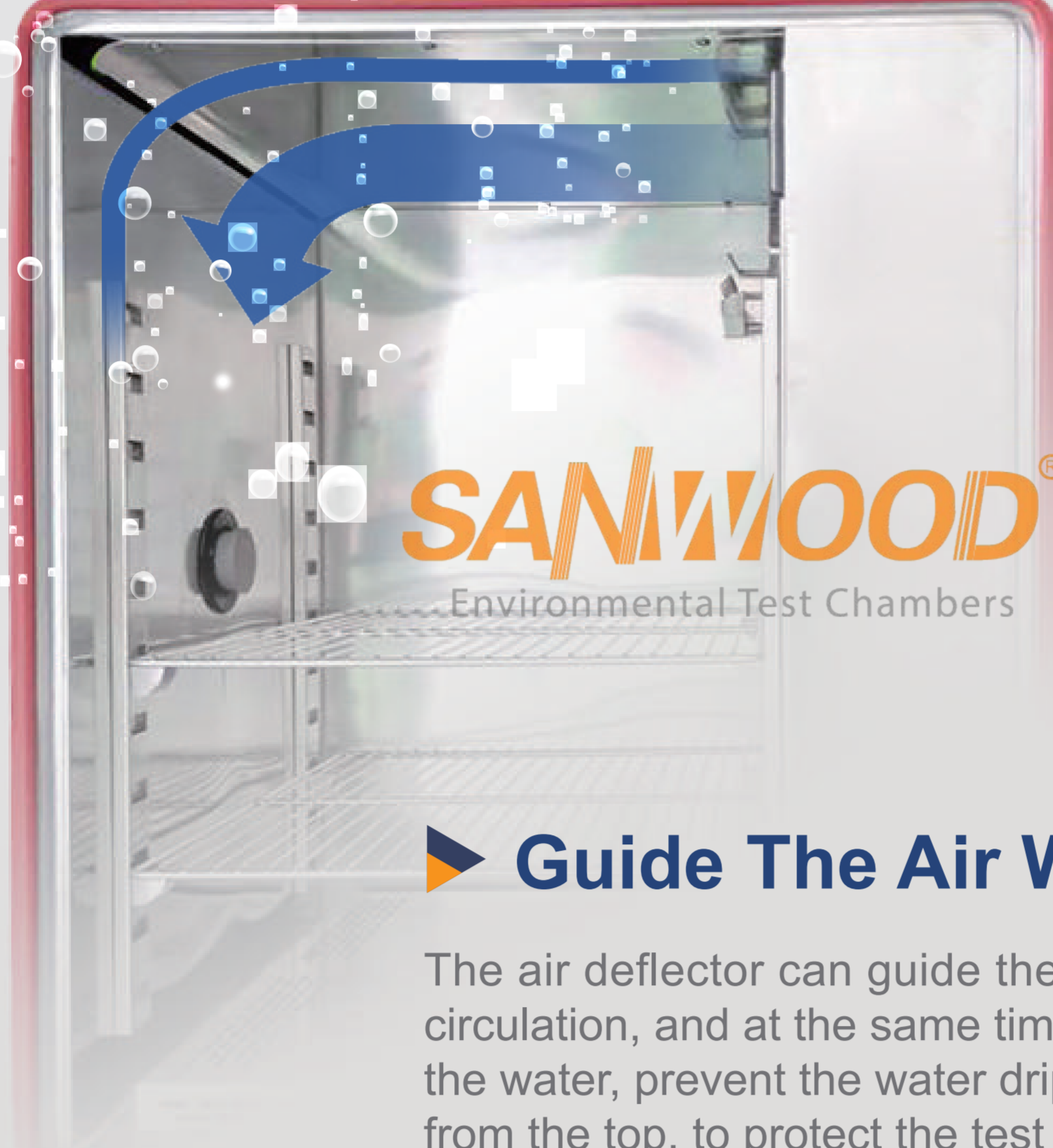
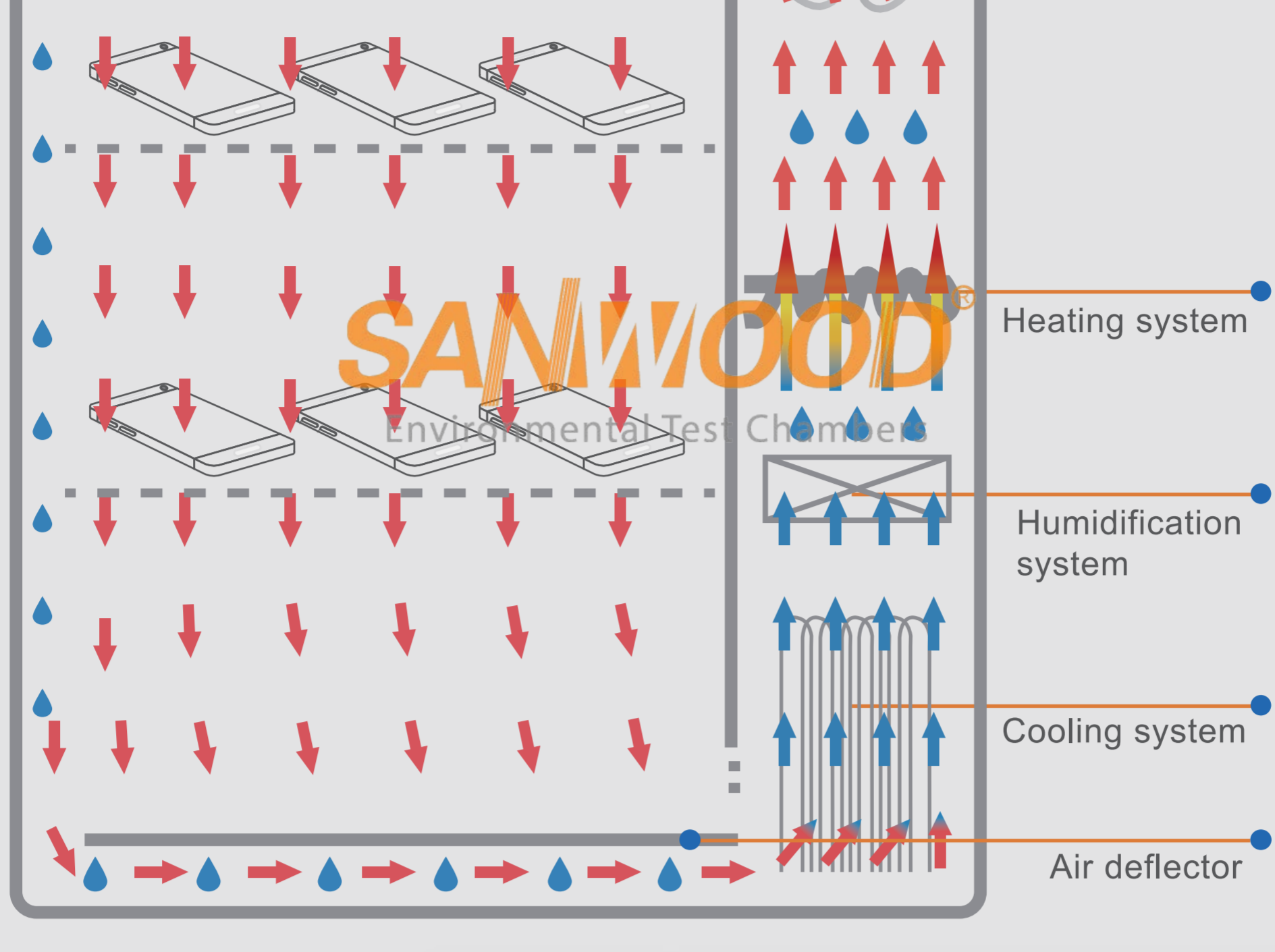
### Circuit System

**U K International Standard**

Our circuit system wiring according to international standard, the layout and color of wires are complied with the international standard, and all equipped with line number, to facilitate maintenance.



**Air supply mode**



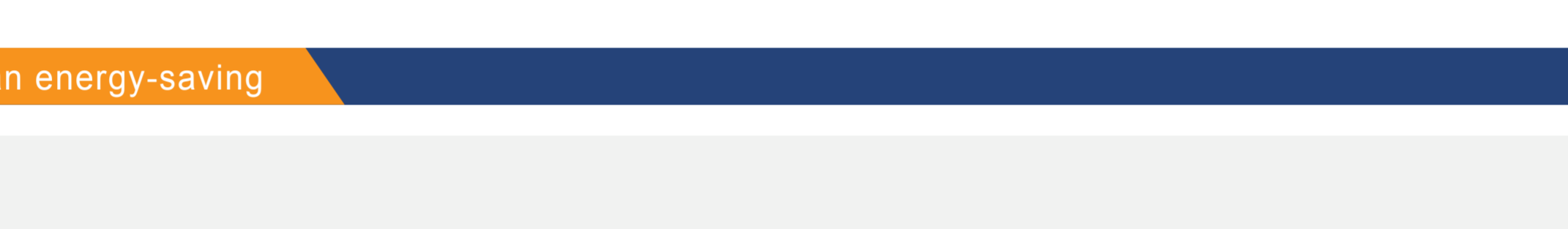
**Guide The Air With Radian**

The air deflector can guide the air to form a air circulation, and at the same time it can drainage the water, prevent the water drip to the sample from the top, to protect the test sample.

**Mute**

**Run With Low Noise**

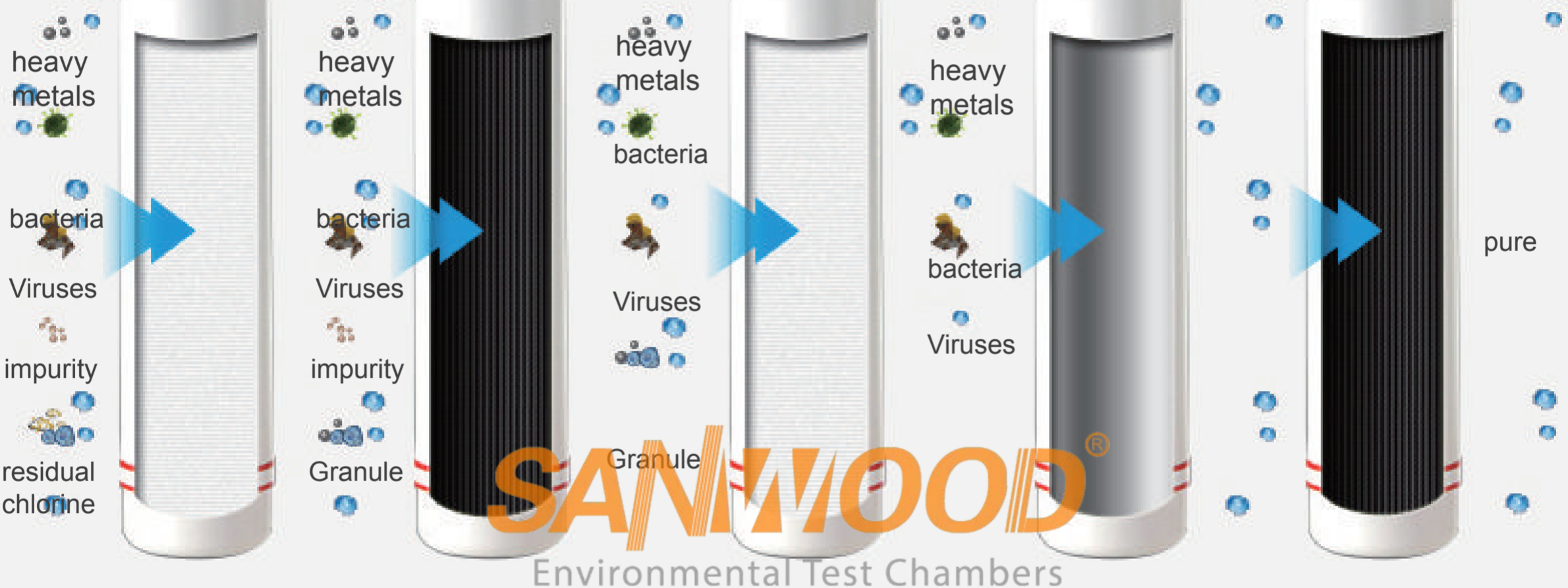
The noise is less than 55db. In order to reduce machine noise and resonance, the refrigeration area is fully sealed and soundproofed.



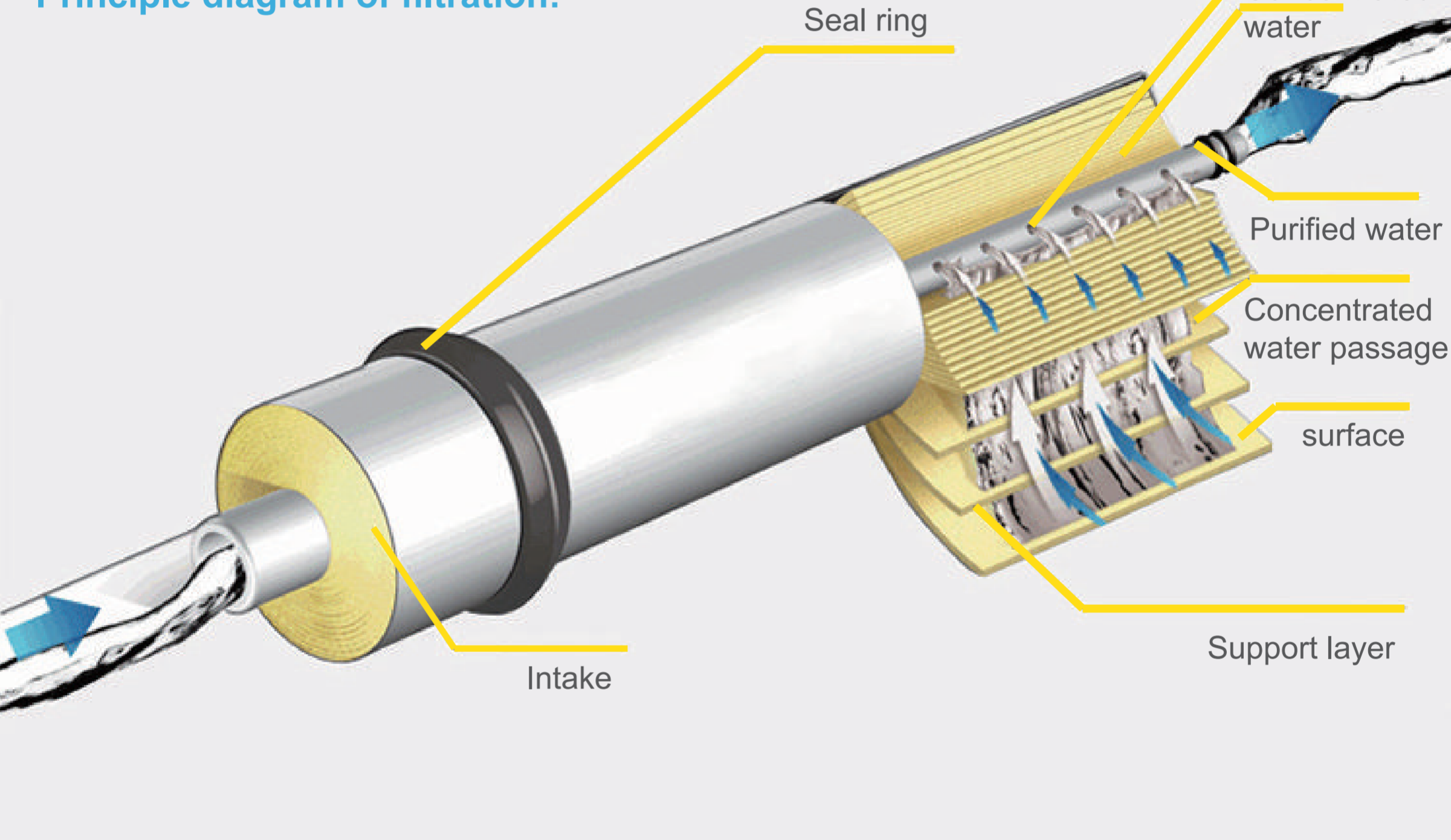
**Clean energy-saving**

**5 levels purely physical filtration system**

Effectively remove sediment, scale, bacteria, heavy metals



**Principle diagram of filtration:**



**Observation window**

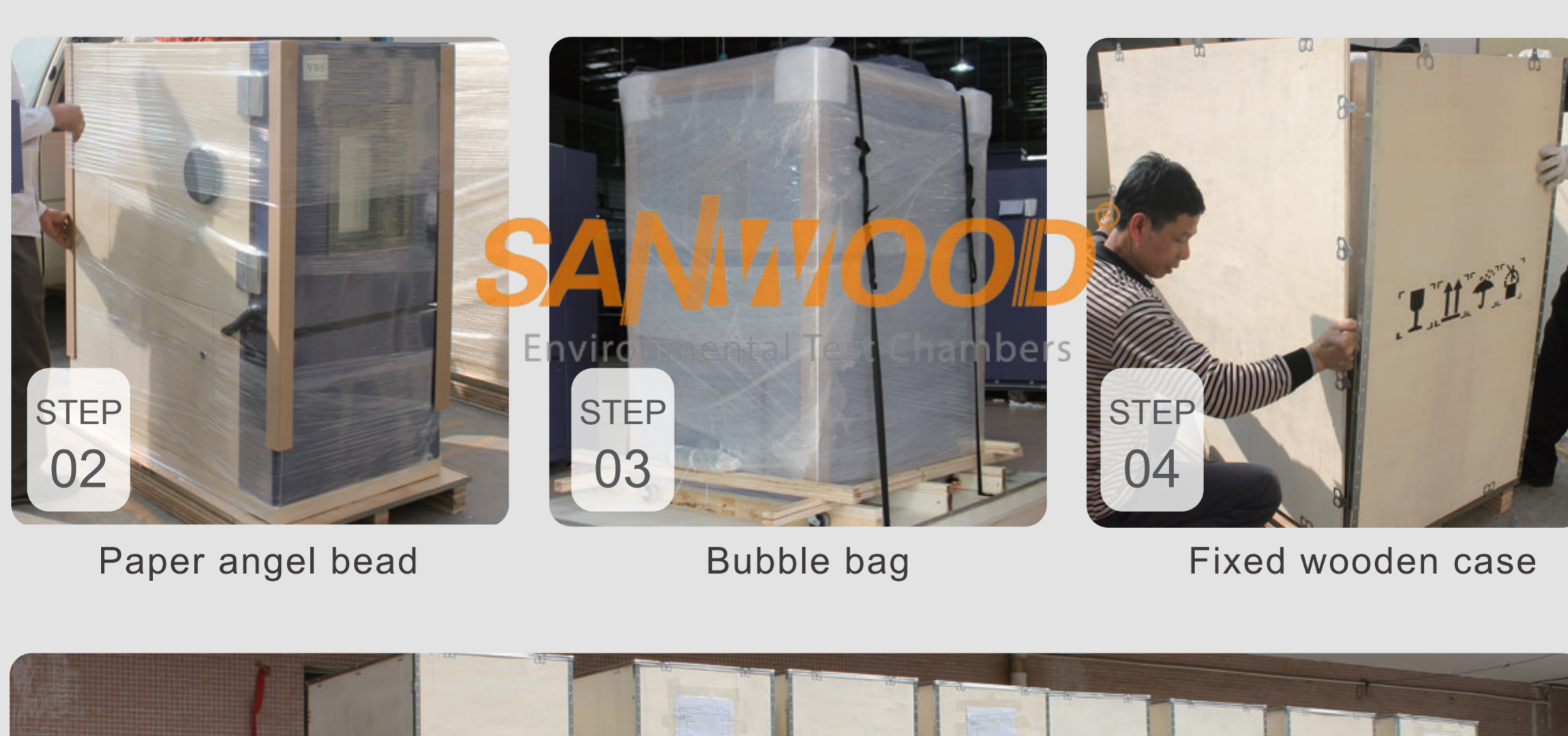


- The window is 4 layers of tempered glass
- You can customize the window size as you like
- Equipped LED lamp

**Packaging process**



Environmental chamber have passed all the inspection and ready for packing



We packed with fumigation and wooden case to protect the goods from any damage

**Parameter**

Model	SMC-22-CC	SMC-27-CC	SMC-64-CC	
Temperature	Temperature range	-60°C~180°C (A:0°C~180°C; B: -20°C~180°C; C: -40°C~180°C; D:-60°C~180°C)		
	Temperature fluctuation	±0.5°C		
	Cooling rate	180.0°C~-60.0°C	Within about 100 minutes	1.0~3.0°C/min
	Heating rate	-60.0°C~180.0°C	Within about 60 minutes	3.0~5.0°C/min
Humidity	Humidity range	20.0%RH~98.0%RH		
	Humidity fluctuation	±1.0% (-40.0°C~100.0°C)		
	Humidity uniformity	±1.5% (100.1°C~180.0°C or -40.0°C~-60.0°C)		
Material	Internal material	SUS304 stainless steel(1.2mm)		
	External material	cold-rolled plate(1.2mm), powder coating		
	Heat insulation	polyurethane foam(100mm)+glass wool(10mm)		
	Fan	Centrifugal fan (Impeller Fan)		
	Refrigerator compressor	hermetic compressor(Tecumseh)		
	Cooling mode	air cooling		
	Refrigerant	R404A、R23、R508		
	Evaporator	finned-tube exchanger		
Heater	nickel chrome strip heater			
Humidifier	Steam Humidifier			
Size	Interior(mm) W*H*D	300X300X250 22.5L	300X300X300 27L	400X400X 400 64L
	Exterior(mm) W*H*D	500X850X1150	500X 850X1190	600X950X1350
	Weight	85kg	105kg	105kg
Working Temperature	+5 ~ 35°C			
Power supply	220V/AC 50/60Hz 12A	220V/AC 50/60Hz 23A	220V/AC 50/60Hz 23A	
Controller	Standard: South Korea TEMI-1500 Optional: South Korea TEMI-2500, South Korea TEMI-2700			

**Installation size**



Region	Distance
A	≥30
B	≥50
C	≥70
D	≥90

**Matters needing attention**

- Protect the chamber from the direct sunlight, maintain good indoor ventilation.
- Don't place the chamber against the wall, keep the chambers from the wall more than 600mm. It will good for heat dissipation, otherwise will occurred error because of overheating.
- Install the chamber in a clean and tidy room, avoid using this chamber in extreme cold, heat, dust or humidity, keep the temperature in 10 to 30, and humidity in 70+~10%.