

# KOMEGB Environmental Walk-in Chamber

Environmental walk-in chambers are used for testing or storing products that require a large capacity chamber.



Applications: full vehicle testing, automotive components, solar panels, electronic components, cables, pcb (printed circuit board), stability testing, biological research, industrial applications and more.

# KOMEG Environmental Walk-in Chamber

## KOMEG Climatic Chambers' Features:

1. **Heat preservation material**, we use high-intensity PU foam high density glass fiber cotton, which can assure high precise and better uniformity and avoid unnecessary energy loss.
2. **Large glass window design**, viewing angle in all directions, hollow electric plating film and anti-condensation design; built-in **LED lights** to facilitate the test sample state of real-time observation in the course of testing; double open door design, with ramp (if need), for convenient operating test samples.
3. Material quality of inner box is SUS304 # stainless steel imported, and outer box is steel plate and the paint process applies automobile coating technology. Box body is processed shape using **Triumph processing machine**, to keep its shape nice and neat.
4. **Large-size Full Color LCD touchscreen controller**, simple operation, easy to edit programs. PID with automatic calculation function; self-diagnostic function, show failure message and failure shot solutions step by step.
5. **An RS-232 and RS-485 communication interface**, matching recorder, strong expandability. We also support remote control by PC via wifi or wire (recommended). (Kindly note: its komeg controller)
6. **Disassembled type**, onsite installation, convenient and cheap transportation



# KOMEG Environmental Walk-in Chamber

KMW-Series Model, KMHW or KMTW.

Inner volume: 2360L, 3000L, 3375L, 7038L,  
8000L, etc.





# KOMEG Environmental Walk-in Chamber

## Customer Cases

Model KMT-3375S for Russian Military Enterprise

Inner volume:

IW1500 x IH 1500 x ID 1500 mm, 3375L;

Temperature range: -70C to +150C;

Programmable control;

Air-cooled (we recommend water-cooled)



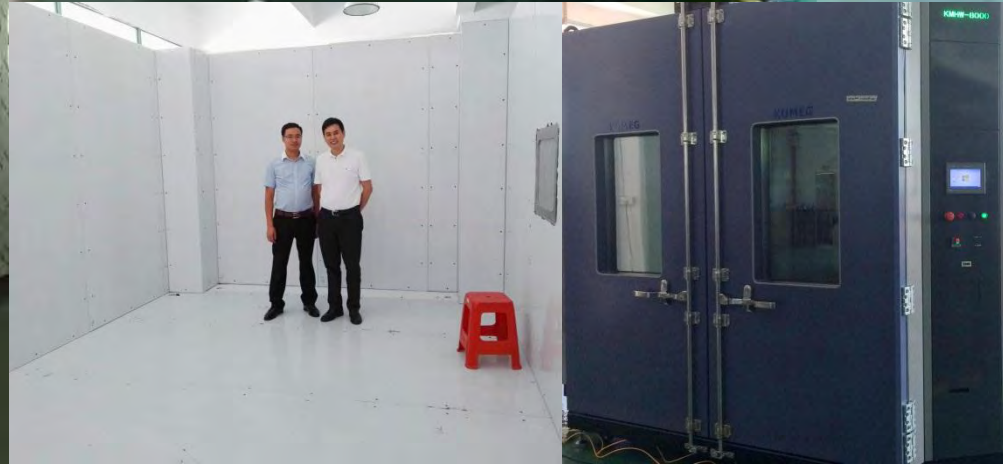
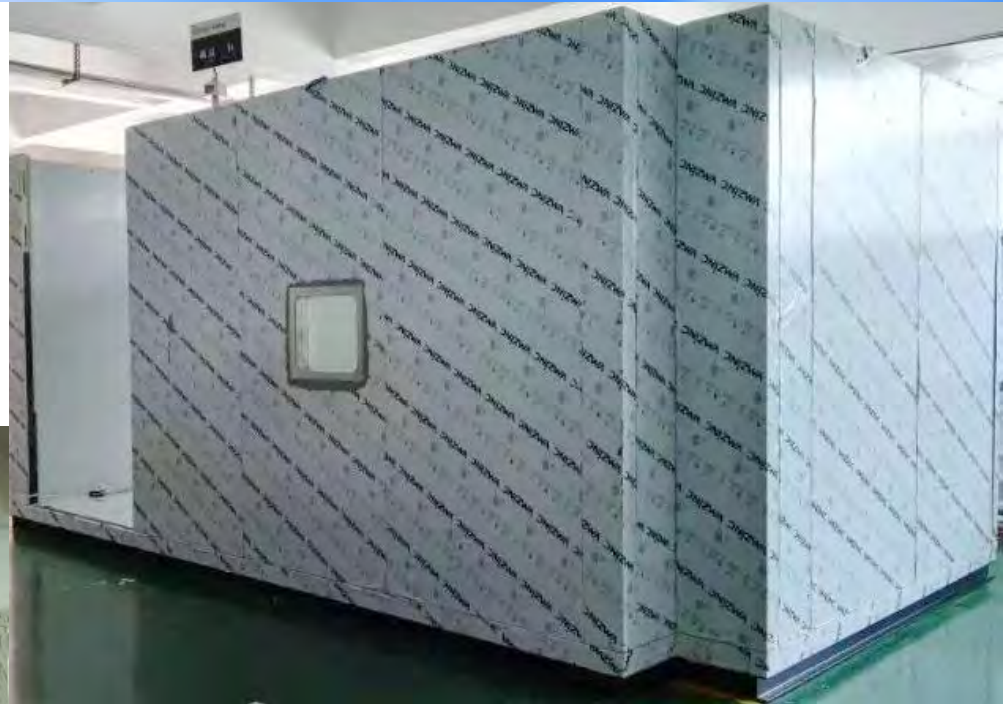
# KOMEG Environmental Walk-in Chamber

Modular Type Walk-in Chambers for KONKA:

KMHW-45000L ( IW 5400 x IH 2400 x ID 3500 mm,  
-40°C to 80°C, 20 to 98%RH );

KMHW-13800L ( IW 2300 x IH 2000 x ID 3000 mm,  
-30°C to + 85°C, 20%R.H. to 98%R.H);

KMHW-8000L.





# KOMEG Environmental Walk-in Chamber

KMHW-12000S for a Military enterprise:

Inner volume:

IW2100 x IH2100 x ID3000 mm ;

Temperature range:  $-65^{\circ}\text{C}$  to  $100^{\circ}\text{C}$ ;

Temperature Humidity control range:

30%R.H  $\sim$  98%R.H ( $+20^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ );

KMHW-17250L for Gree

Inner Volume:

IW 3000 x IH 2300 x ID 2500 mm;

Temperature range:  $-70^{\circ}\text{C}$   $\sim$   $+85^{\circ}\text{C}$ ;

Humidity range: 20%R.H  $\sim$  98%R.H

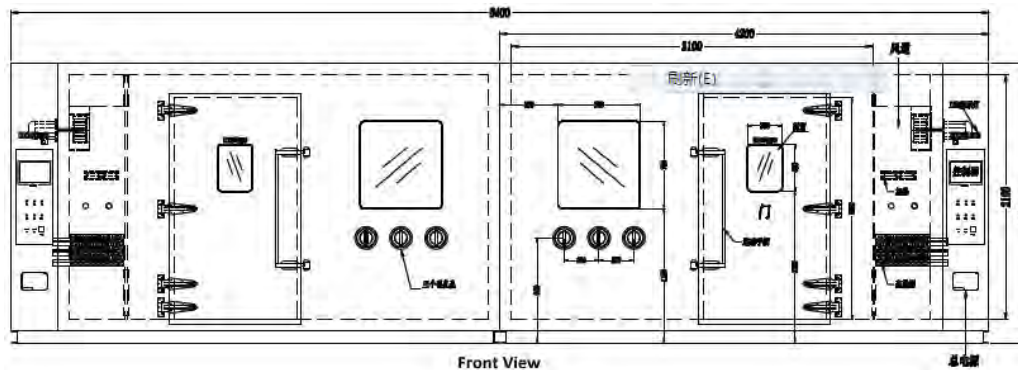


# KOMEGB Environmental Walk-in Chamber

KMHW-13020S (2 sets \*2) for LG

Inner Volume: IW 3100 x IH 2100 x ID 2000 mm;

Temperature range:  $-50^{\circ}\text{C}$  to  $+90^{\circ}\text{C}$ ; Humidity range: 20%R.H. to 95%R.H.



KMHW-11040L for Samsung

Inner Volume:

IW 2000 x IH 2400 x ID 2300 mm;

Temperature range:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ ;

Humidity range: 20%R.H. to 95%R.H.





*Gentle reminder:*

*Below content is about a customer of cable manufacturer, they need a walk-in chamber for whole optical cable testing.*

*They compared our technical solution with several other supplier's, and decided to come to visit our factory and our Walk-in Chambers running in customer's lab, now we have confirmed the order, and it's under production.*





# KMTW-9680L Technical Requirements and Solutions

**According to Premier's initial technical requirements:**

1) the inner volume is 9CBM (9000L)?

Yes, inner volume is almost 9000L.

**IW 2200 x IH 2200 x ID2000mm, Double door, with doors opening W2000 x H2000 mm.**

2) the temperature range is -40C to +80C?

Yes, **-40 to 80 C**

3) do you need humidity control? if need, what's the humidity range?

Yes, **humidity control range of 40% to 95%.**

4) if convenient, please advise the test samples?

We are optical fiber cable manufactures we check complete drum in the chamber

I am sending image for your reference. Receive cables drum pictures by what's app.

5) How about your request for the bottom weight bearing? If the baseplate bearing is very big, then we need to thicken the board.

**Max weight is 2.5 ton (Approx.).**

6) How about testing holes / cable ports? and what's your request for the its diameter and location?

Two testing hole required of 100 mm, location will left side.

**We provide initial technical specification for KMHW-9680L, drawing, price.**

# KMTW-9680L Technical Requirements and Solutions

## Further Discussion (Questions and solutions):

### Part 1: PU Foam Thickness

Q1. the thickness of PU Panel please confirm the thickness of it.

the thickness of PU panel is 100mm.

Q2. Our Engineer is recommending that thickness of PU panel should be 130mm instead of 100mm.

Do you have any recommendation in it?

Generally, for -40C to +80C, the PU panel thickness of 100mm is enough.

For -50C to +90C, we also use 100mm. We made walk-in chambers of -50C ~ +90C for LG, and it's running very well. Only when the temperature is below -50C, we will use 150mm. We have very good technology in PU foaming, and our PU foam insulation is high-density and rigid, it has very good insulation effect. So, for testing of -40C to +80C, PU foam of 100mm has enough insulation safety margin.





# KMTW-9680L Technical Requirements and Solutions

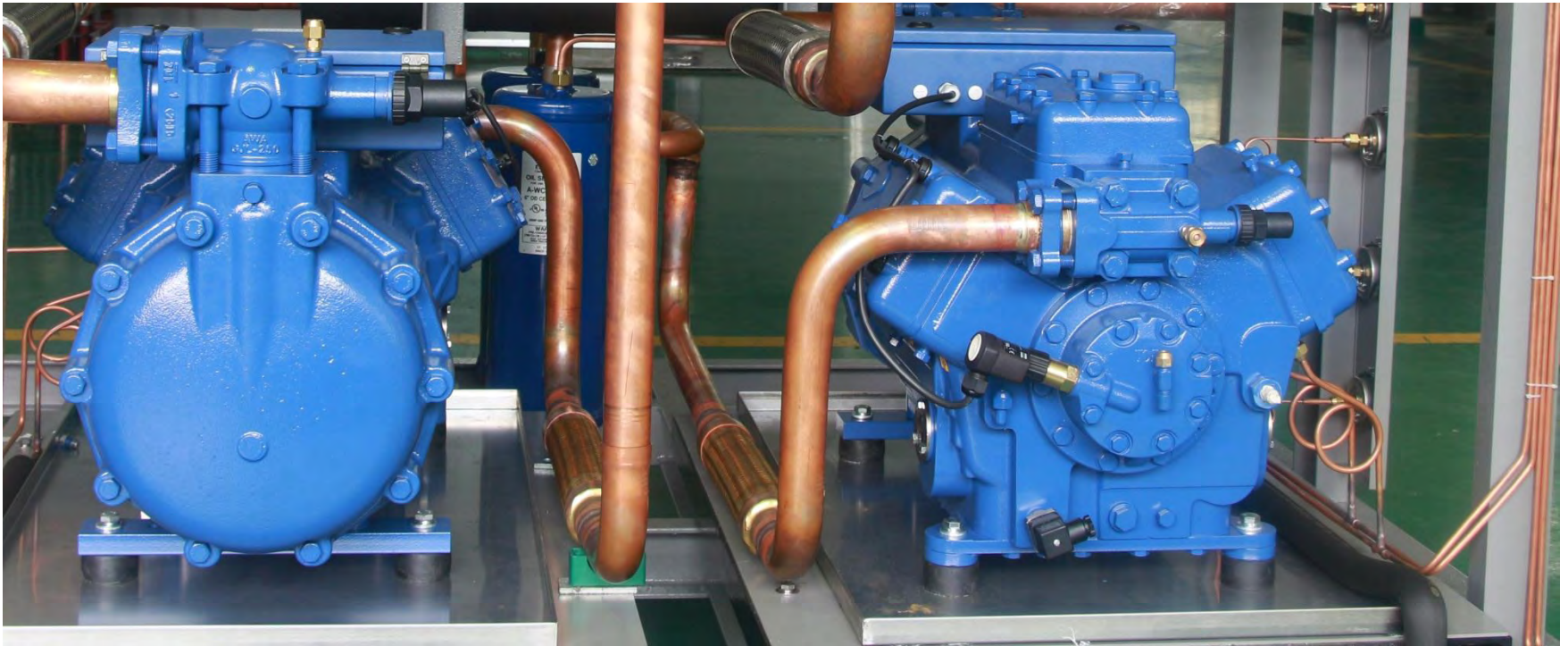
## Part 2: Compressor, refrigerant:

Q1. Which refrigerant (gas) you are using in this unit?

We use R404A.

Q2. How about the quantity of compressors and the capacity (KW) of compressor

GEA Bock compressor, 1 set, the capacity of the compressor is 20HP.



# KMTW-9680L Technical Requirements and Solutions

## Part 3: Controller:

company owned brand KOMEG KM-5166

LCD touch screen controller with PID control parameters setting

7-inch TFT display screen.

Temperature: + 0.01°C; Humidity: + 0.1%; time: 1min.

Programmable running, constant running and booking boot

Temperature and humidity settings (SV) Practical (PV) value can be displayed directly,

Execution of the program can display numbers, paragraphs, remaining time and cycles, running time display,

Program editing and graphic curve display, Fixed or program operation status display,

Data collection and curve display when connected to a computer Can be used as monitoring and remote control system Multiple machines synchronization control available R232, RS485

For more information, please contact: [fiona@komegtech.com](mailto:fiona@komegtech.com)

