

# UP-6195C Temperature Humidity Vibration Test Chamber



# Temperature.humidity and vibration test chamber/Temp.humidity and vibration compatible Chambers

For years Temp.humidity and vibration compatible Chambers have been the workhorses of the environmental test chamber industry. Originally created to meet military test standards, their flexible design has made them suitable for a wide variety of applications. Fast temperature changes of 5 to 25°C/m. are possible, even with significant loads. The chambers have a removable floor, allowing integration with vibration test systems. Custom designs are common, allowing configuration to meet your exact requirements.

Special model can interface with both vertical and horizontal vibration systems

#### **Feature**

1, Capacity: 63 L to 6000L

2,TemperatureRange:-160°C,-140°C,-120°C,-100°C, -80°C,-70°C,-60°C,-40°C,-

 $20^{\circ}\text{C},\!0^{\circ}\text{C}\!\!\sim\!\!+150^{\circ}\text{C},\!200^{\circ}\text{C},\!250^{\circ}\text{C},\!300^{\circ}\text{C},\!400^{\circ}\text{C},\!500^{\circ}\text{C}$ 

3, Humidity Range: 10-99%RH

4,Cooling rate: 2-3°C/min (standard), 5°C/min, 10°C/min, 20°C/min as option

5, Vibration: maximum up to 5000kgf, 100g

### **Refrigeration and Plenum**

- 1,Rear-mounted plenum with cooling coil and nichrome wire heaters
- 2,Two ¾ h0p blower motors with one-piece stainless steel shafts
  - 3,Non-CFC cascade refrigeration system using semi-hermetic Copeland Discus compressors
  - 4, Hinged service access doors with lockable snap-action latches

## **Technical parameters:**

| Model No                               |                           | UTHV-306                                                                                                                     | UTHV-408     | UTHV-800          | UTHV-1000          |  |
|----------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------|--------------------|--|
| Inner chamber size(mm)W*H*D            |                           | 850*600*600                                                                                                                  | 850*600*800  | 1000*1000*80<br>0 | 1000*1000*10<br>00 |  |
| Exterior chamber                       |                           | 1750*800*102                                                                                                                 | 1750*800*132 | 1900*1200*13      | 1900*1200*15       |  |
| size(mm)W*H*D                          |                           | 0                                                                                                                            | 0            | 20                | 20                 |  |
| Max table-board size of Vibrostand(mm) |                           | Horizontal:400*400                                                                                                           |              |                   |                    |  |
|                                        |                           | Vertical:400*400                                                                                                             |              |                   |                    |  |
| Performanc<br>e                        | Temperature range         | -160°C,-140°C,-120°C,-100°C,-80°C,-70°C,-60°C,-40°C,-<br>20°C,0°C~+150°C,200°C,250°C,300°C,400°C,500°C                       |              |                   |                    |  |
|                                        | Humidity range            | 20%~98%R.H (10%~98%R.H;5%~98%R.H Optional).                                                                                  |              |                   |                    |  |
|                                        | Temp.&Humi fluctuation    | ±0.5°C, ±2%.                                                                                                                 |              |                   |                    |  |
|                                        | Temp.Humi.Uniformi        | ±1°C, ±2%.                                                                                                                   |              |                   |                    |  |
|                                        | Temp.humi Deviation       | ≤±2°C/ ±3%RI                                                                                                                 | Η.           |                   |                    |  |
|                                        | Heating up time           | About 3~4°C/min.(Customized requirements:Fast temperature change rate:5°C~25°C/min,linear average or nonlinear average).     |              |                   |                    |  |
|                                        | Cooling down time         | About 0.7°C~1°C/min (Customized requirements:Fast temperature change rate:5°C~25°C/min,linear average or nonlinear average). |              |                   |                    |  |
|                                        | Inner chamber<br>material | SUS#304 stainless steel plate                                                                                                |              |                   |                    |  |
|                                        | Exterior chamber material | Stainless steel plate+ powder coated                                                                                         |              |                   |                    |  |
|                                        | Insulation Material       | PU & Fiberglass wool                                                                                                         |              |                   |                    |  |
| System                                 | Air circulation system    | Cooling fan                                                                                                                  |              |                   |                    |  |
|                                        | Fan                       | Sirocco fan                                                                                                                  |              |                   |                    |  |

|                          | Heating System          | SUS#304 stainless steel high-speed heater                                     |  |  |
|--------------------------|-------------------------|-------------------------------------------------------------------------------|--|--|
|                          | Air flow                | Forced Air Circulation(It enters at bottom and leaves at top)                 |  |  |
|                          | Humidification          | Forced Air Circulation(It enters at bottom and leaves at top)                 |  |  |
|                          | system                  | Surface evaporation system                                                    |  |  |
|                          |                         | Imported compressor, Tecumseh compressor (or Bizer                            |  |  |
|                          | Refrigeration system    | Compressor), finned type evaporator, air(Water)-cooling                       |  |  |
|                          |                         | condenser                                                                     |  |  |
|                          | Refrigerating fluid     | R23/ R404A USA Honeywell.                                                     |  |  |
|                          | Condensation            | Air(Water)-cooling condenser                                                  |  |  |
|                          | Dehumidifying system    | ADP critical dew point cooling/dehumidifying method                           |  |  |
|                          | Controlling system      | Digital electronic indicators+S.S.R.With PID automatic calculation capability |  |  |
|                          | Operation interface     | Grande Expertise in Temperature & Humidity Controller, Chinese-English Shift. |  |  |
| Controller               | Programmable capability | Save 120 profiles with up to 1200 steps each                                  |  |  |
|                          | Setting range           | Temperature:-100°C+300°C                                                      |  |  |
|                          | Reading accuracy        | Temperature:0.01°C                                                            |  |  |
|                          | Input                   | PT100 or T Sensor                                                             |  |  |
|                          | Control                 | PID control                                                                   |  |  |
|                          | Communication interface | Equipped with standard communication interface                                |  |  |
|                          |                         | devices USB,RS-232 and RS-485,enable the test chamber to                      |  |  |
|                          |                         | be connected with personal computer(PC), to achieve multi-                    |  |  |
|                          |                         | machine control and management at the same time. Standard:                    |  |  |
|                          |                         | USB external memory port. Optional: RS-232, RS-485, GP-IB,                    |  |  |
|                          |                         | Ethernet                                                                      |  |  |
|                          | Print function          | Japan Yokogawa Temperature Recorder(Optional accessories)                     |  |  |
|                          | Auxiliary               | Limit Alarm, Self Diagnosis, Alarm Display(Failure                            |  |  |
|                          |                         | Cause), Timing device(Automatic Switch)                                       |  |  |
| Accessories              |                         | Multi-layer vacuum glass observation window, Cable                            |  |  |
|                          |                         | port(50mm), Controlling status indicator lamp, Chamber                        |  |  |
|                          |                         | light,Specimen loading shelf(2pcs,position adjustable),Guaze                  |  |  |
|                          |                         | 5pcs,Operation manual 1 set.                                                  |  |  |
| Safety protection device |                         | Over-heat protection circuit breaker, Compressor overload                     |  |  |
|                          |                         | protection, Control system overload protection, Humidifying                   |  |  |
|                          |                         | system overload protection, Overload indicator lamp.                          |  |  |
| Power supply             |                         | AC 1Ψ 110V;AC 1Ψ 220V;3Ψ380V 60/50Hz                                          |  |  |
| Customized service       |                         | Welcome to Non-standard, Specail requirements, OEM/ODM orders.                |  |  |
|                          |                         | orucis.                                                                       |  |  |