Lab Companion®

# Heat Aging Laboratory HWT-19-5

## Custom solutions

High temperature aging laboratory is also called aging room (burning room), is for high performance electronic products (such as: computer machine, display, terminals, automotive products, electronic products, power supply, host board, monitor, switching charger, etc.) simulation of a high temperature, bad environment test equipment, is an important experimental equipment to improve product stability and reliability.

The room size of the isolated aging room is designed according to customer requirements. The five temperature control systems can realize separate temperature control, and use the insulation sliding door or double open insulation door when entering and leaving, and the observation window can be set according to the need to observe the indoor product testing situation outdoors. If the power supply is required, install the power socket in a convenient position to meet the needs of the product aging test.

www.labcompanion.cn
Lab Companion Industrial Park - Chang ping Town - Dong guan City-Guangdong Province - China
Tel:+86 400 628 2786
e-mail:info@lab companion.cn

## Technical characteristics

### Performance

Type：HWT-19-5

Temperature range: R.T + 15℃ ~80℃ (arbitrarily set)

Temperature fluctuation: ±2.0℃

Temperature deviation: ≤± 2.0°C

Temperature uniformity: ≤2°C

Temperature rise rate: R.T~65℃ about 30min

Noise level: 75dB, A sound level

Working volume：19m³

| Dimensions（mm） | w | h | d |
|---|---|---|---|
| Use full | 850 | 2500 | 1800 |
| Over all | 5050 | 2890 | 2155 |

### Design Features：

1. Box structure: the box adopts the overall structure, divided into five rooms to independently control the temperature.
2. Shell material: high quality cold-rolled steel plate electrostatic injection, strong cold and hot fatigue function, long service life.
3. Inner wall material: stainless steel plate.
4. Insulation material: ultrafine glass fiber.
5. Door seal: using environmental friendly silicone rubber strip to ensure the high sealing of the equipment door, ultrafine centrifugal glass fiber + polyurethane mixed insulation layer-to ensure that the heat loss is reduced to the minimum, the temperature resistance of the equipment is higher.

## Structure and working principle

**air conditioning**

1. Air regulation mode: forced ventilation internal circulation balance temperature regulation.
2. Air circulation device: built-in air conditioning device, circulating air duct, long axis axial flow fan.
3. Heating method: high-quality nickel-chromium alloy electric heater.

TT&C system


monitor

1. Temperature measurement: PT100 Platinum resistance.
2. Control device: use the intelligent digital temperature controller.
   - ●Temperature control mode: automatic set two-bit PID control.
   - ●Temperature setting mode: make the digital setting in the controller.
   - ●Temperature display mode: the set temperature and the measured temperature are displayed in the controller.
   - ●The product has a self-setting function to ensure that the temperature is constant at each set point.
   - ●The product has a linear compensation function to avoid the inconvenience of display errors.
3. The product is separately equipped with an overtemperature protection instrument, which is used to set the upper limit alarm of the working temperature to prevent the damage caused to the test product and test box due to failure.
4. Operation mode: constant operation.

**safety precautions**

1. Over temperature protection setting: triple over temperature protection setting
   ①Set temperature of the over temperature dial plate = set temperature + 15℃. When the temperature in the box exceeds the set temperature of the over temperature dial, the buzzer in the box alarms, the box is in standby state, and it should be reused after manual reset.
   ②Over temperature alarm: when the product in the box continues to heat up and exceeds the temperature set by the internal parameters of the controller, the buzzer in the box will alarm, which should be reset manually before reuse.
   ③Anti-dry burning protector: set near the heating pipe. When the heating dry burning exceeds the temperature set of the protector, the equipment alarms and stops.
2. the heater short circuit;
3. Drum-blast motor overload.