

PC Dual-Temperature Zones All-in-One Testing System

1. Product model

1.1 Material code WHW-200L2-0C-220V-9U-PC

1.2 Equipment appearance



The picture is for reference only, subject to the actual product

2. Product application

Application scenarios

Constant temperature test of snap-on cells
 Electronics, electrical appliances, instrumentation, materials, semiconductors and other production enterprises carry out constant temperature tests on non-flammable and non-explosive items
 Environmental protection, agriculture and animal husbandry, aquatic research institutions and production for water analysis, bacteria, mold, microbial culture, preservation, plant cultivation, breeding test constant temperature test

3. Sample restrictions

This test equipment is prohibited:
 Test or storage of samples of inflammable, explosive and volatile substances
 Testing or storage of corrosive material samples
 Test or storage of samples from strong electromagnetic sources
 Testing and storage of radioactive material samples
 Testing and storage of samples of highly toxic substances
 Tests or storage of samples of the above substances or objects during testing or storage

4. Volume, size and weight

4.1 Nominal volume 100L×2 (volume of single temperature zone 100L)



4.2 Inner box size W500mm×D500mm×H400mm (single temperature zone)

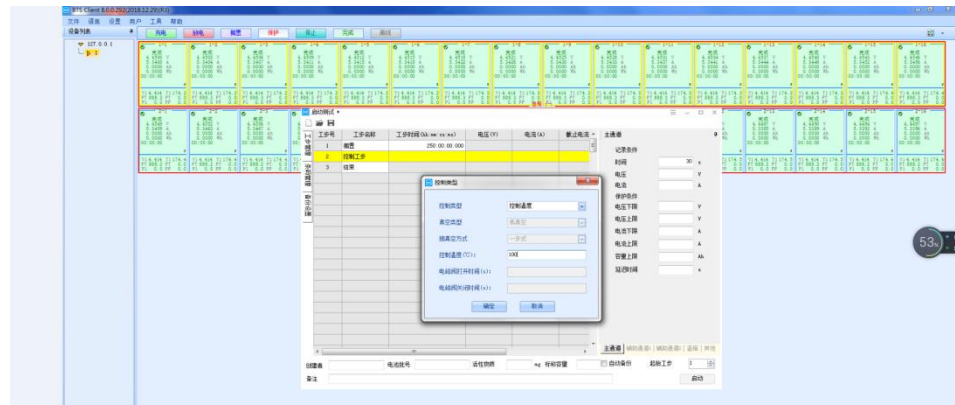
4.3 External dimensions W600mm×D950mm×H1920mm

4.4 Weight About 300kg

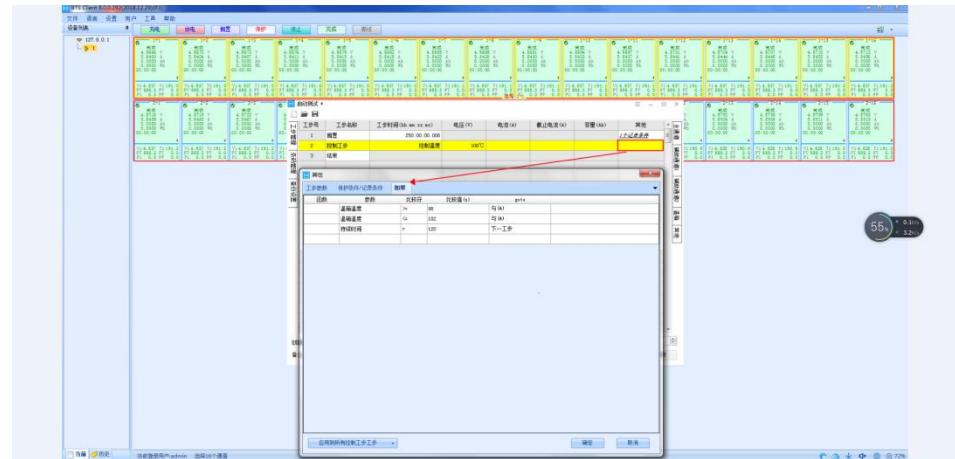
5. Performance

5.1 Test environment conditions The ambient temperature is +25°C, the relative humidity is less than or equal to 85%, and there is no sample in the test chamber (no load)

5.2 Test method	GB/T 5170.2-2017 Temperature test equipment
5.3 Temperature range	0~60°C
5.4 Temperature fluctuation	≤±0.5°C (no load, temperature stable)
5.5 Temperature deviation	±2.0°C (no load, temperature stable)
5.6 Heating time	25°C→60°C ≤30 min (no load, average nonlinear)
5.7 Cooling time	25°C→0°C ≤50 min (no load, average nonlinear)
5.8 PC computer	Equipped with a PC
6. Structural characteristics	
6.1 Insulation envelope structure	Exterior wall material: high quality cold rolled steel plate, surface spray treatment Inner wall material: stainless steel plate SUS304 Insulation material of the box: polyurethane foam (insulation thickness 50mm)
6.2 Air conditioning channel	Axial flow fan, heater, evaporator
6.3 Standard configuration of test chamber	Observation window: multi-layer hollow electric heating film heating anti-fog observation window (located on the door) Lead hole (with soft rubber plug): Φ50mm /2 (located at the rear of the box) Casters: 4 (with brakes) Cell tray: 2 layers of electric insulation cell tray, load-bearing Uniformly distributed: 10kg/layer Lighting: LED lighting
	
6.4 Control panel	Touch control button
6.5 Air conditioning unit	Stainless steel heating tube Heater control mode: contactless periodic pulse width modulation, SSR (solid state relay)
7. Refrigeration system	
7.1 Refrigeration compressor	Fully enclosed piston compressor
	
7.2 Cooling mode	Air-cooled
7.3 Throttle device	Capillary
7.4 Refrigerant	R134a
7.5 Welding process	Nitrogen protection welding
8. Electrical control system	
8.1 Controller	LED digital display + touch key controller



Step 5: Set the work step control conditions



10. Safety protection device

Test chamber Leakage protection, short circuit protection and abnormal operation of circulating fan

11. Other configurations

11.1 Power cable **(One single-phase + protective earth wire) cable (the specific specification is selected according to the contract requirements)**

11.2 Total power leakage circuit breaker Single phase + protective earth wire

12. Transportation (the test chamber is integral and transported as a whole)

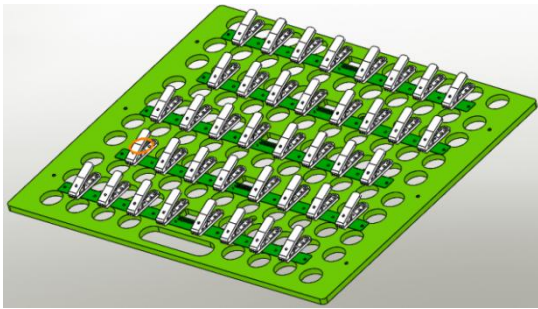
Size Maximum transport size (excluding packaging): "see 4.3 External dimensions"

13. Conditions of use: The user shall guarantee the following conditions (the installation of power supply lines shall be the responsibility of the user)

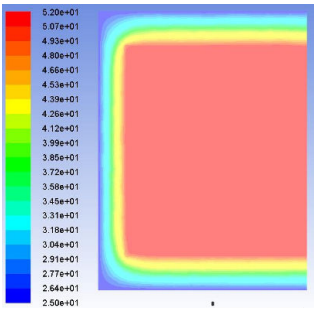
13.1 Installation site
 The ground is flat, and the flatness is less than 5mm/2m
 well-ventilated
 There is no strong vibration around the equipment
 There is no strong electromagnetic field around the equipment
 There is no flammable, explosive, corrosive substances and dust around the equipment
 There should be appropriate space for use and maintenance around the equipment. There should be space for the door of the box to open and close normally at will, and there

	should be no other objects in front of the door of the box
13.2 Environmental conditions	Temperature: 5°C~35°C; Relative humidity: less than or equal to 85%; Air pressure: 86kPa~106kPa
13.3 Power supply conditions	AC (220±22)V (50±0.5)Hz single phase + protective earth wire The grounding resistance of the protective earth wire is less than 4Ω Power supply: The user is required to configure the corresponding capacity of air or power switch for the equipment at the installation site, and this switch must be independently supplied for the use of the equipment Power supply capacity: 3kW Maximum current: 16A
13.4 Others	Opening the door of the test chamber during the test will cause temperature fluctuations in the chamber; if the door is opened repeatedly or kept open for a long time during the test, or the test sample emits moisture vapor, it may cause frost or ice on the heat exchanger of the refrigeration system and fail to work normally

14. Cell specifications and placement method

14.1 Cell specification	Plug-in cells (up to 80CH in single temperature zone, up to 160CH in double temperature zone)
14.2 Cell placement method	The second floor of the single temperature zone is placed (the double temperature zone has four floors in total), and each floor is 40CH
14.3 Cell tray form and cell fixing method (cell tray can be customized according to needs) The cell pallet is made of electrically insulated bakelite material	 <p>Note:</p> <ol style="list-style-type: none"> 1. Power cable (including plug) should be ordered separately according to the specific needs of users; 2. The pictures are for reference only.

15. Simulation diagram of stable operation of temperature in the test chamber (only schematic)

No-load run	
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