



**WHW-200L2-0C-220V-5V100mA-160CH**

**Dual-Zone All-in-one Constant Temperature Chamber**

# **Specification**

**Neware Technology Limited**

## 1、 Product

**WHW-200L2-0C-220V-5V100mA-160CH**

**Dual-Zone All-in-one Constant Temperature Chamber**


(Picture for reference, please confirm the actual product)



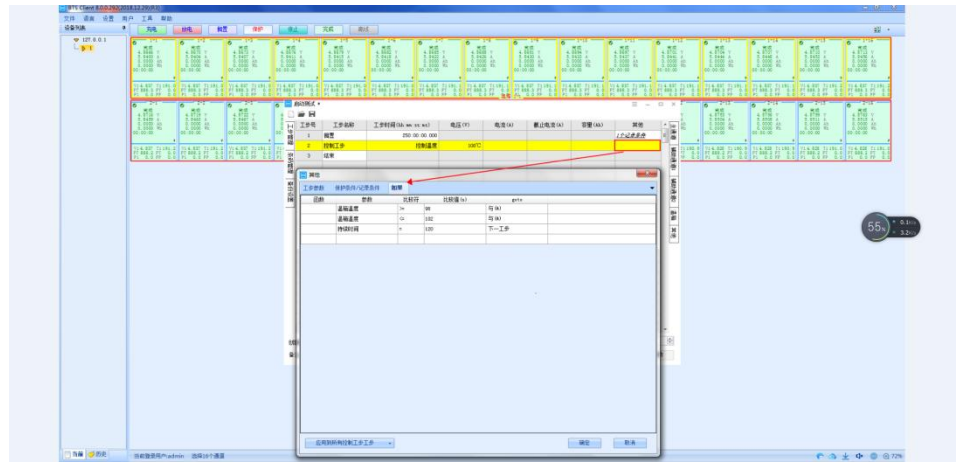
1.1 Model	<b>WHW-200L2-0C-220V-5V100mA-160CH</b>
2、 Application	Constant temperature test of coin cells. Apply to electricians, electronics instrumentation, materials, semiconductors, etc. It is a reliability testing equipment for battery performance test by new energy enterprises and scientific research institutes.
3 、 Testing Material Limit	<b>Strictly forbidden to test or storage in below situation:</b> <b>Inflammable, explosive and volatile materials</b> <b>Corrosive material</b> <b>Biological sample</b> <b>Strong electromagnetic emission source</b> <b>Radioactive substance</b> <b>Extremely toxic substance</b> <b>Anything that can produce above substance or material</b>
<b>4、 Volume and Dimension</b>	
4.1 Internal volume	100L×2 (100L per single zone)
4.2 Internal dimension	W500 mm×D500 mm×H400 mm
4.3 Overall dimension	W600 mm×D950 mm×H1920 mm
4.4 Net Weight	About 300KG

<b>5、 Performance</b>	
5.1 Testing environmental condition	Ambient temperature: +25°C Relative humidity ≤ 85% No sample in the test box (No loading)
5.2 Temperature range	0 ~ 60°C
5.3 Temperature range	≤ 0.5°C (No loading, stable temperature)
5.4 Temperature deviation	± 2.0°C (No loading, stable temperature)
5.5 Heating time	25°C → 60°C ≤ 30 min
5.6 Cooling time	25°C → 0°C ≤ 50 min
<b>6、 Structure</b>	
6.1 Heat Preservation	Outside material: High quality cold-bonded steel plate, surface spray and paint treatment Inner material: Stainless steel SUS304 Cabinet heat preservation material: Rigid polyurethane foam (insulation thickness: 50mm)
6.2 Air conditioning	Axial flow fan, heater, evaporator
6.3 Standard configuration	Box door: hollow anti-fog tempered glass + stainless steel frame Cable Holes (soft rubber plugs): φ50mm, 4 pcs (Rear of Cabinet) Caster: 4 Sample layer: 4 Sample layer with high temperature resistant electric insulation ; Loading bearing (evenly distributed): 10kg/ layer Lighting: 1 pcs LED
6.4 Control panel	Touch control buttons
6.5 Heater	Stainless heating pipe Heater control mode: contact-free equiperiodic pulse width adjustment, SSR (solid state relay)



<b>7、Refrigeration System</b>	
7.1 Refrigeration compressor	Fully enclosed compressor 
7.2 Cooling mode	Air cooled
7.3 Throttling device	Capillary
7.4 Refrigerant	R134a
7.5 Welding process	Nitrogen-filled shielded welding
<b>8、Control System</b>	
8.1 Controller	LED digital display + touch key controller
8.2 Setting method	touch-key
8.3 Controlling method	Forced circulation ventilation balance temperature regulation method. The control system controls the output of the heater according to the set temperature value through the PID automatic calculation output result, so as to achieve dynamic balance.
8.4 Communication	Ethernet standard interface
8.5 Temperature control module	Independent research and development (through high and low temperature impact, vibration and EMC and other related reliability performance testing)
<b>9、The connection between chamber and battery tester</b>	
9.1 Battery Testing Equipment	5PCS BT-4032Q-5V100mA-HWX
9.2 Control unit	1 PCS BT-4002-ZWJPLUS-HWX
9.3 Switch	1 PCS





**10、 Safety protection configuration**

Testing chamber	leakage protection、 short circuit protection
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**11、 Other configurations**

11.1Power cables	(1 phase + protective ground wire)1-wire cable
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11.2Main power leakage circuit breaker	1 phase + protective ground
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**12、 Transportation**

Dimension	See 4.3
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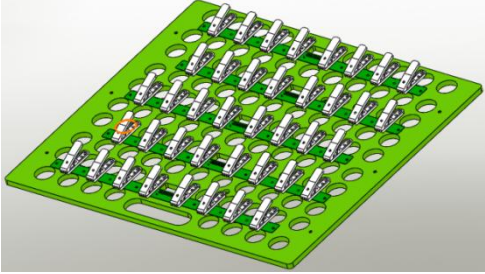
**13、 Condition of usage ( Prepared by customer)**

13.1Installation Requirement	<p>Smooth land,flatness<math>\leq 5\text{mm}/2\text{m}</math>,well ventilated</p> <p>No strong vibration or strong electromagnetic field around the equipment.</p> <p>No inflammable, explosive, corrosive and dust around the equipment.</p> <p>Proper use and maintenance space should be left around the equipment. The opening door of the equipment should have a space where the door can be opened and closed normally, and there is no other object in front of the door.</p>
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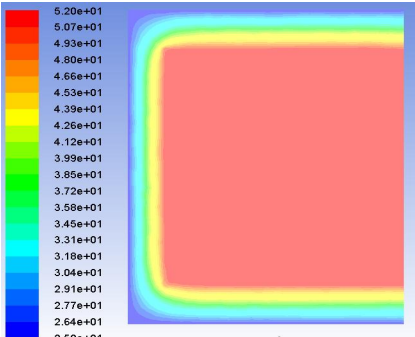
13.2Environment conditions	<p>Temperature: <math>5^{\circ}\text{C}\sim 35^{\circ}\text{C}</math></p> <p>Relative humidity: <math>\leq 85\%</math></p> <p>Air pressure: <math>86\text{kPa} \sim 106\text{kPa}</math></p>
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13.3	Power supply conditions	AC(220±22)V (50±0.5)Hz Single phase + protective ground Protect the earth grounding resistance less than 4 Ω
	Power	The user is required to equip the equipment with an air or power switch of corresponding capacity at the installation site, and the switch must be independently used by the equipment
	Distribution power	3 kW
	Maximum current	16 A
13.4	Others	Please do not open the chamber's door too often, it may affect the testing temperature in chamber

#### 14、 Battery Specification and placement mode

14.1	Battery Specification	Coin cells 5V100mA160CH (5V 100mA 80CH per single zone)
14.2	Battery placement	2 layers for single zone (4 layers total for dual-zone), 40CH per layer
14.3	Sample layer (can be customized )  The sample stand is made of resistant electric insulation material	 <p>Note: The power cord (including plug) shall be ordered separately according to the user's specific requirements. The pictures are for reference only; the actual product shall prevail.</p>

#### 15、 Simulation diagram when the temperature in the chamber is running stably(Only for reference)

No-load running	
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