Mini Constant Temperature Chamberer

1. Product model number: WHW-25L-S

Model naming method

Model	WHW	-	25L	-	4T	S	-	5V10mA 160CH	-	220V	-	B
Characteristic	①		②		③	④		⑤		⑥		⑦

Symbol meaning	
①	Constant temperature test box series
②	Nominal volume: 25L (other digital analogy)
③	4T: 4 temperature zones (not indicated by the single temperature zone)
④	Refrigeration mode: S represents the semiconductor refrigeration (temperature range: 15℃ -60℃) Compressor refrigeration does not indicate (temperature range: 0℃ -60℃)
⑤	5V10mA 160CH: Power supply equipment specifications and number of channels, but not omitted by default
⑥	220V: Equipment voltage 220V (default 220V omitted not indicated, other voltages by analogy)
⑦	B: Product iteration update version number, then A, B, C....., Default A does not indicate

2. Product application: Constant temperature test of buckle cell and new energy small soft package polymer cell (millipere level)

3. Limit the sample: This test equipment is prohibited by:

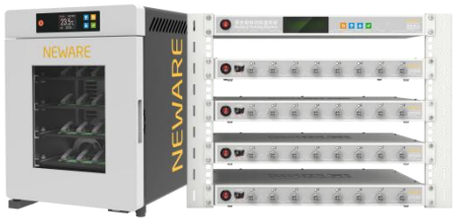
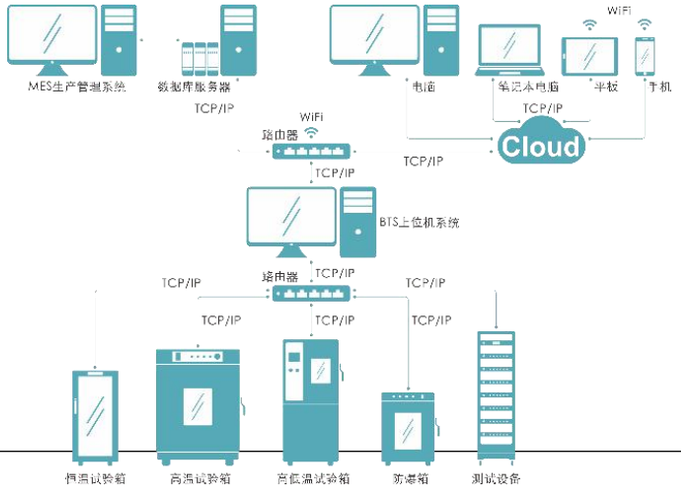
- Test or storage of samples of inflammable, explosive and volatile substances
- Test or storage of test samples of corrosive substances
- Test or storage of samples of strong electromagnetic emission sources
- Test and storage of test samples of radioactive substances
- Test and storage of test samples of highly toxic substances
- Testing or storage of tests or specimens that may produce such substances or objects

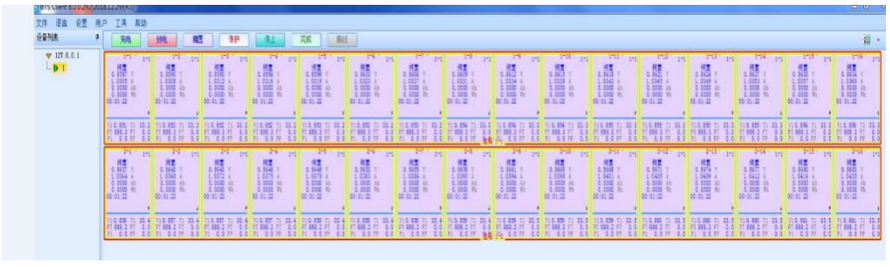
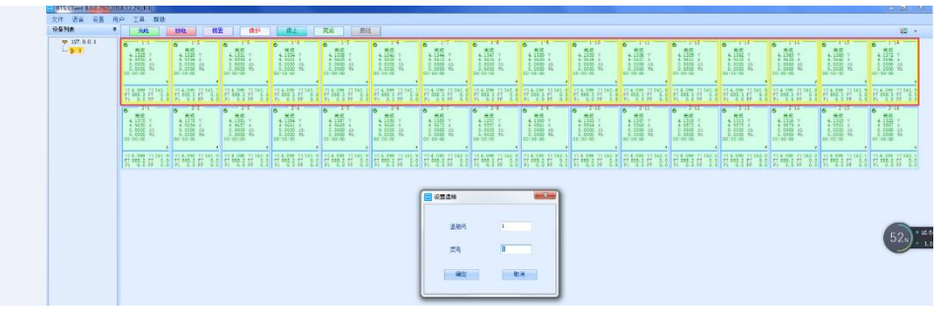
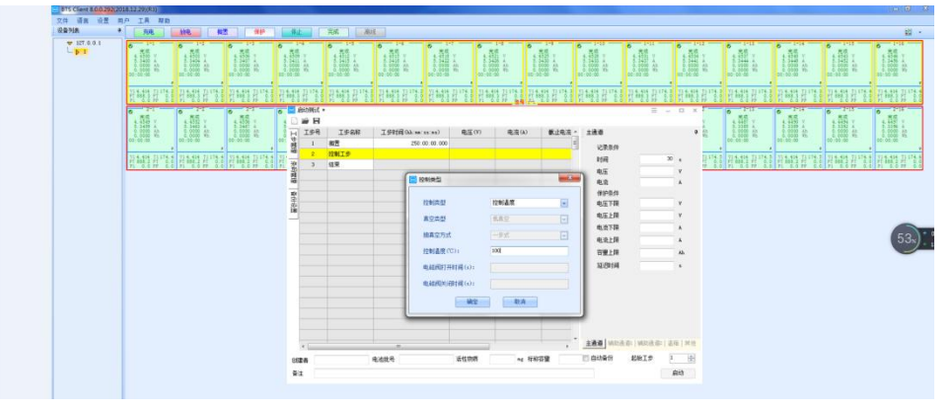
4. Volume, size and weight

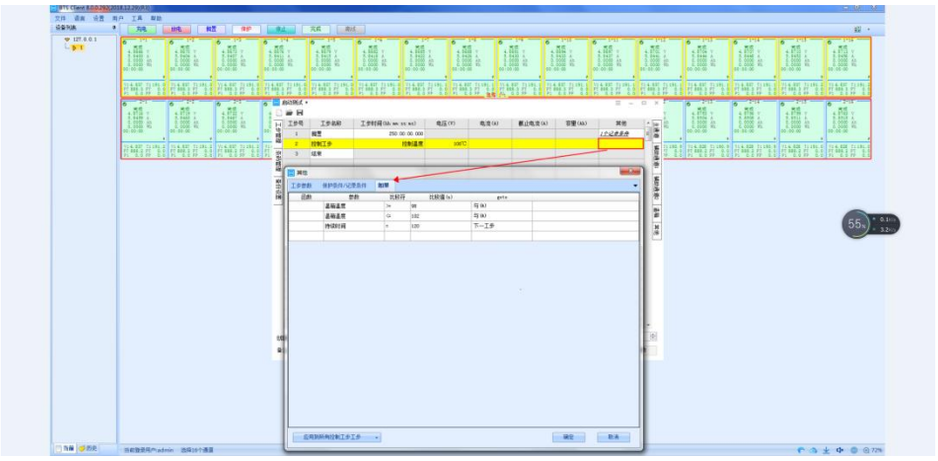
4.1 Nominal content product	25L
4.2 Inner box size	W280mm × D250mm × H330mm
4.3 Overall dimensions	W360mm × D450mm × H500mm

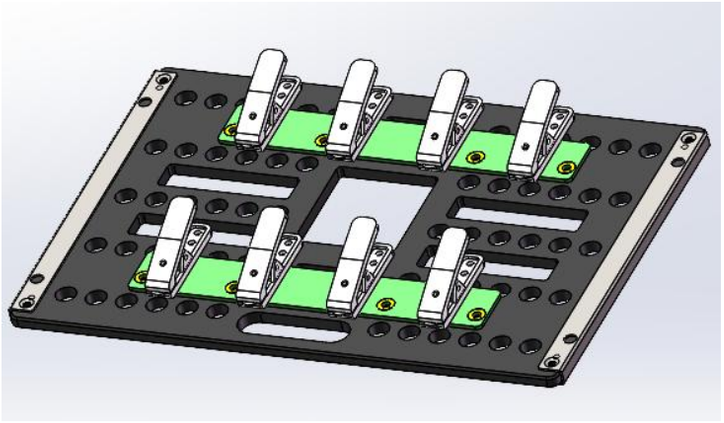
Web: neware.co.kr Tel: 010-9345-0834 E-mail: sales@neware.co.kr

4.4 Net weight of the equipment	About 40kg
5. Performance	
5.1 Test the environmental conditions	Ambient temperature is + 25℃, relative humidity is 85%, with no sample in the test box (no load)
5.2 Temperature range	15~60℃
5.3 Temperature fluctuation degree	1℃ (equivalent to ± 0.5℃, with no load and stable temperature)
5.4 Temperature deviation	± 2.0℃ (when no load and temperature is stable)
5.5 Heating-up time	25℃~60℃ ≤50 min (no load, average nonlinearity)
5.6 Cooling down time	25℃~15℃ ≤60 min (no load, average nonlinearity)
6. Structural characteristics	
6.1 Thermal insulation and envelope structure	Outer wall material: high quality cold-rolled steel plate, surface spray plastic and paint treatment Inner wall material: stainless steel plate SUS304 Box body insulation material: polyurethane foam
6.2 Air conditioning channel	Axial flow fan, semiconductor refrigeration (heating) module
6.3 Standard configuration of the test box	Box door: hollow tempered glass + frame Lead hole (with soft plug): ϕ 50mm / 1 (at the back of the box) Cell tray: electric insulation, cell tray 2 layers, load-bearing (all cloth): 2kg layer Lighting: LED lighting lamp  /
6.4 The Control Panel	Touch-type control button

6.5 Air conditioning unit	Semiconductor refrigeration (heating) module
7. Electrical control system	
7.1 controller	LED digital display + touch key type controller
7.2 Setting mode	Touch key type
7.3 Control mode	Forced circulation ventilation. The control system controls the output of the semiconductor refrigeration (heating) module through the PID automatic operation output result according to the set temperature value, so as to achieve a dynamic balance
7.4 Communication mode	The Ethernet standard interface
8. Interconnection with the battery cell testing equipment	
8.1 Hardware connection of the equipment	BTS upper computer, cell testing equipment and test box pass Channel lines, and data communication lines to achieve hardware interconnection 
8.2 Schematic diagram of the network	

8.3 Upper computer programming control interface (see equipment random data for details)	Step 1: Open the software interface  Step 2: Select to set up the test box  Step 3: Find the test box to be set up  Step 4: Set up the test box to control the temperature 

	Step 5: Set the working step control conditions 
9. Power cord	
Power cable	(Single-phase + protected ground wire) 1 cable (the specific specifications are selected according to the contract requirements)
10. the transportation test box is the whole type, the whole transportation	
size	Maximum shipping size (excluding packaging): "See 4.3 Outline dimensions"
11. The following conditions are guaranteed by the user (the user is responsible for the installation of the power supply line of the equipment)	
11.1 Installation site	well-ventilated No strong vibration around the equipment There is no strong electromagnetic field influence around the equipment There is no flammable, explosive, corrosive substances and dust around the equipment
11.2 Environmental conditions	Temperature: 25℃± 3℃; Relative humidity: 85%; Air pressure: 86 kPa ~ 106 kPa
11.3 Power supply conditions Power capacity maximum current	AC (220 ± 10%) V / 50Hz or AC (110 ± 10%) V / 60Hz single-phase + protected ground wire 0.2k W 1A (220V) or 2A (110V)
11.4 Other	Opening the door of the test box during the test will cause the temperature fluctuation in the box
12. Cell specifications and placement method	
12.1 Cell	Bucp or soft pack cell (mA)

specifications	
12.2 Cells placement mode	Second floor placement (up to 8 buckle cells can be placed on each floor)
12.3 Cell tray form and cell fixing mode (cell tray can be customized as needed) Cell tray using electric, insulated electric wood quality	 Button cell