

## BTS-6004A-5V600A-H Battery Testing System

**Tester**  
(Image for reference only)



**Dimension**

600\*660\*1350 (mm)

**Weight**

Around 173KG

**Cable Length By Default**

3.0m (connecting to battery rack or insert to environmental chambers)

**Clamp Selection**  
(Image for reference only)

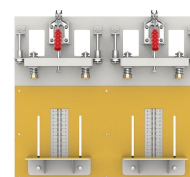
☐ Polymer pouch-cell clamps



☐ Cylindrical-cell holder  
- diameter: Ø \_\_\_\_ mm  
- height: \_\_\_\_ mm  
- poles on same / opposite side



☐ Prismatic-cell holder  
- size: W\_\_\*D\_\_\*H\_\_ (mm)  
- poles on same / opposite side  
- need technical sketch



**Auxiliary Unit Add-on (Optional)**

☐ (8CH voltage + 8CH Temperature) per unit

**CAN Box Unit Add-on (Optional)**

☐ CAN, RS485, BMS communication,  
with DBC configuration function

Channel Information		
Items		Values
Channel counts		4 channels
Channel Feature		CC source and CV source dual closed loop control
Channel ccontrol mode		Independent control
Channel parallel connection		Support max. 4 channels parallel mode (Pulse and SIM tests will be disabled in channels parallel mode.)
Power Grid Requirement		
Items		Values
Input power		3Phase 380Vac or 208Vac $\pm 15\%$   50/60 $\pm 5$ Hz
Power factor		$\geq 99\%$ (Full load)
THDi		$\leq 5\%$ (Full load)
Input resistance		$\geq 1\text{M}\Omega$
Input power		17.1kW
Input current		26.0A/phase for 380V system   47.6A/phase for 208V system
Overall system efficiency(Max)		75%
Noise		$\leq 65\text{dB}$
Voltage and current sampling		Four-wire Kelvin connection (same port for charging and discharging)
Power control module type		MOSFET
Input power wiring method		Three-phase five-wire (3W+N+PE)
Power input protection		Anti-surge, anti-silos, anti over or under frequency, anti over or under voltage, anti phase absence, etc.
Function & Performance		
Items		Values
Voltage	Output range	0V~5V
	Min discharge V	1.5V
	Accuracy	$\pm 0.05\%$ of FS
	Resolution	24bit
Current	Output range	Range 1: 75A   Range 2: 150A   Range 3: 300A   Range 4: 600A
	Accuracy	$\pm 0.05\%$ of FS
	CV cut-off current	R1: 75mA   R2: 150mA   R3: 300mA   R4: 600mA
	Resolution	24bit

<b>Power</b>	<b>Output power / CH</b>	3kW
	<b>Whole machine output power</b>	12kW
<b>Time</b>	<b>Current response</b>	≤3ms
	<b>Current conversion</b>	≤6ms
	<b>Min. step time</b>	0.1s
<b>Charge &amp; Discharge Mode</b>	<b>Charge modes</b>	CCC / CVC / CC-CVC / CPC
	<b>Discharge modes</b>	CCD / CVD / CPD / CRD
	<b>Cut-off condition</b>	Voltage / Current / ΔTime / Capacity / -ΔV
<b>Simulation</b>	<b>Charge</b>	Current, Power
	<b>Discharge</b>	Current, Power
	<b>Switch</b>	Support continuous switching between charge and discharge
	<b>Cut-off condition</b>	Time, step line
	<b>Steps file lines</b>	1,000,000
<b>Pulse Mode</b>	<b>Charge</b>	Current ,power
	<b>Discharge</b>	Current ,power
	<b>Min pulse width</b>	50ms
	<b>Pulse counts</b>	Up to 32
	<b>Charge &amp; discharge switch</b>	Supported
	<b>Cut-off condition</b>	Voltage, ΔTime
<b>DCIR</b>		DCIR by calculation
<b>Safety Protection</b>	<b>Software Protection</b>	Power-off data protection
		Offline mode function
		voltage lower limit ,voltage upper limit ,current lower limit , current upper limit ,delay time, etc.
	<b>Hardware Protection</b>	Anti-reverse connection, over-voltage, over-current, over-temperature, etc.

Data Management and Analysis		
Items		Values
Step setting method		Form editing
Data report	Recording Conditions	Minimum time interval: <b>10ms</b> When connected with AUX channel: 100ms
		Minimum voltage interval: <b>10mV</b>
		Minimum current interval: <b>R1: 150mA   R2: 300mA   R3: 600mA   R4: 1200mA</b>
	Recording frequency	<b>100Hz</b> (when connected with AUX channel: 10Hz)
Database		MySQL database
Data export		EXCEL / TXT / CSV / PDF / Plot / Graph
Curve type		Templates available, customization supported
Bar code scanning		Support bar-code scanning function
		Management and traceability of historical data
Communication		
Items		Values
Host computer communication		TCP/IP protocol
Communication port		Ethernet port
Tester communication baud rate		1M
Host communication baud rate		10M~100M adaptive
Communication setup		Set up a LAN (local area network) through switches and routers
Operating system		Windows 7/8/10 64bit
Operation and storage environment requirement		
Items		Values
Operationenvironment temperature		-10~40°C (Limiting temperature) 25±10°C (Guaranteed accuracy of 0.005% of FS/°C)
Storage environmenttemperature		-20~50°C
Operation environment humidity		≤70% RH (no moisture condensation)
Storage environment humidity		≤80% RH (no moisture condensation)

Auxiliary Unit Add-on (Optional)		
Items		Values
Description		It is used to monitor the temperature of the battery surface or the tabs during the test. The aux test data can be bound with the main voltage and current data. At the same time, the measured temperature can be used as the control condition and protection condition of the test profiles.
Temp. Aux channels	Temp. range	Thermocouple: -70~260°C
	Temp. accuracy	±1°C
	Temp. resolution	0.1°C
Voltage Aux channels	Voltage range	0~5V
	Voltage accuracy	±0.05% of FS
	Voltage resolution	0.1mV