BTS-6002A-5V1500A-H Battery Testing System

Tester **(Image for reference only)**	
Dimension	600*660*1350 (mm)
Weight	Around 205KG
Cable Length By Default	3.0m (conneting to battery rack or insert to environmental chambers)

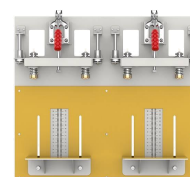|		
Clamp Selection **(Image for reference only)**	☐ Polymer pouch-cell clamps	
	☐ Cylindrical-cell holder - diameter: Ø _____ mm - height: _____ mm - poles on same / opposite side	
	☐ Prismatic-cell holder - size: W__*D__*H__ (mm) - poles on same / opposite side - need technical sketch	
Auxiliary Unit Add-on (Optional)	☐ (8CH voltage + 8CH Temperature) per unit	
CAN Box Unit Add-on (Optional)	☐ CAN, RS485, BMS communication, with DBC configuration function	
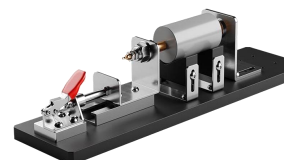
Channel Information

Items	Values
Channel counts	2 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 ±15% | 50/60±5Hz
Power factor	≥99%(Full load)
THDi	≤5%(Full load)
Input resistance	≥1MΩ
Input power	21.4kW
Input current	32.6A/phase for 380V system | 59.5A/phase for 208V system
Overall system efficiency(Max)	75%
Noise	≤65dB
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	±0.05% of FS
	Resolution	24bit
Current	Output range	Range 1: 75A | Range 2: 150A | Range 3: 300A | Range 4: 1500A
	Accuracy	±0.05% of FS
	CV cut-off current	R1: 75mA | R2: 150mA | R3: 300mA | R4: 1500mA
	Resolution	24bit

Power	Output power / CH	7.5kW
	Whole machine output power	15kW
Time	Current response	≤3ms
	Current conversion	≤6ms
	Min. step time	0.1s
Charge & Discharge Mode	Charge modes	CCC / CVC / CC-CVC / CPC
	Discharge modes	CCD / CVD / CPD / CRD
	Cut-off condition	Voltage / Current / ΔTime / Capacity / -ΔV
Simulation	Charge	Current, Power
	Discharge	Current, Power
	Switch	Support continuous switching between charge and discharge
	Cut-off condition	Time, step line
	Steps file lines	1,000,000
Pulse Mode	Charge	Current ,power
	Discharge	Current ,power
	Min pulse width	50ms
	Pulse counts	Up to 32
	Charge & discharge switch	Supported
	Cut-off condition	Voltage, ΔTime
DCIR		DCIR by calculation
Safety Protection	Software Protection	Power-off data protection
		Offline mode function
		voltage lower limit ,voltage upper limit ,current lower limit , current upper limit ,delay time, etc.
	Hardware Protection	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: 10ms When connected with AUX channel: 100ms
		Minimum voltage interval: 10mV
		Minimum current interval: R1: 150mA |R2: 300mA |R3: 600mA |R4: 3000mA
	Recording frequency	100Hz (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