# BTS-6001A-5V2000A-H Battery Testing System

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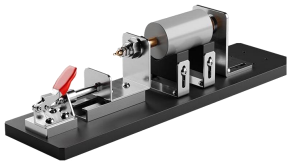
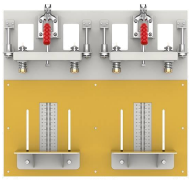
|---|---|---|
| **Tester**<br>**(Image for reference only)** |  | |
| **Dimension** | 600*660*1350 (mm) | |
| **Weight** | Around 169KG | |
| **Cable Length By Default** | 3.0m (conneting to battery rack or insert to environmental chambers) | |
| **Clamp Selection**<br>**(Image for reference only)** | ☐ Polymer pouch-cell clamps |  |
| | ☐ Cylindrical-cell holder<br>- diameter: Ø ____ mm<br>- height: ____ mm<br>- poles on same / opposite side |  |
| | ☐ Prismatic-cell holder<br>- size: W__*D__*H__ (mm)<br>- poles on same / opposite side<br>- need technical sketch |  |
| **Auxiliary Unit Add-on (Optional)** | ☐ (8CH voltage + 8CH Temperature) per unit | |
| **CAN Box Unit Add-on (Optional)** | ☐ CAN, RS485, BMS communication,<br>with DBC configuration function | |

| Channel Information | |
|---|---|
| **Items** | **Values** |
| **Channel counts** | 1 channel |
| **Channel Feature** | CC source and CV source dual closed loop control |
| **Channel ccontrol mode** | Independent control |
| **Channel parallel connection** | Support max. 3 channels parallel mode<br>(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** | 14.3kW |
| **Input current** | 21.7A/phase for 380V system \| 39.7A/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 |
| **Voltage** – **Min discharge V** | 1.5V |
| **Voltage** – **Accuracy** | ±0.05% of FS |
| **Voltage** – **Resolution** | 24bit |
| **Current** – **Output range** | Range 1: 75A \| Range 2: 150A \| Range 3: 300A \| Range 4: 2000A |
| **Current** – **Accuracy** | ±0.05% of FS |
| **Current** – **CV cut-off current** | R1: 75mA \| R2: 150mA \| R3: 300mA \| R4: 2000mA |
| **Current** – **Resolution** | 24bit |

| | | |
|---|---|---|
| **Power** | **Output power / CH** | 10kW |
| | **Whole machine output power** | 10kW |
| **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<br>When connected with AUX channel: 100ms |
| | | Minimum voltage interval: 10mV |
| | | Minimum current interval: R1: 150mA \|R2: 300mA \|R3: 600mA \|R4: 4000mA |
| | **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)<br>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 |