

## Specifications of BTS9000-5V5A-8CH



Items		Values
AC input		AC 220V ±10% 50Hz / AC 110V ±10% 50Hz
Resolution		AD : 16bit ; DA : 16bit
Input impedance		≥ 500MΩ (power on), LC=100uA(power off)
Input power		500 w
Features		4 ranges, high acquisition frequency, high accuracy
Channels control mode		Independent control
Voltage	Voltage output	Charge : 0.7 V~5V ; Discharge : 0.7 V~5V ( 0.5m data wire )
	Lowest output voltage	0.7 V ( 0.5m data wire )
	Accuracy	± 0.02% of FS
	Stability	±0.005% of FS
Current	Current output ranges	Range 1: 0.1uA---150uA
		Range 2 : 150uA---5mA
		Range 3 : 5mA---150mA
		Range 4: 150mA---5A
	Accuracy	± 0.02% of FS
		Range 1: ± 30nA
		Range 2 : ± 1uA
		Range 3 : ± 30uA
Range 4: ± 1mA		
Stability	±0.005% of FS	
Power	Output power/CH	25W
	Stability	± 0.01% of FS
Time	Current response time	<= 100μS (10% to 90% or 90% to 10%);
	Testing step time range	>=10ms
Data record	Data record conditions	Time Δt : >=1ms

Items		Values
		Voltage $\Delta U$ : $\geq 1\text{mV}$
		Current $\Delta I$ : $\geq 100\text{nA}$
	<b>Frequency</b>	1000Hz, Pulse
<b>Charge</b>	<b>Modes</b>	CC, CCCV, CV, CP, CR
	<b>End conditions</b>	Voltage, Current, $\Delta t$ , Capacity, Energy, Power
<b>Discharge</b>	<b>Modes</b>	CC, CP, CR, Pulse
	<b>End conditions</b>	Voltage, Current, $\Delta t$ , Capacity
<b>Pulse</b>	<b>Charge</b>	CC, CP
	<b>Discharge</b>	CC, CP
	<b>Min. pulse width</b>	400 $\mu\text{s}$
	<b>Pulses counts</b>	Up to 16 changes in each pulse
	<b>End conditions</b>	Voltage, $\Delta t$
<b>DCIR</b>	<b>Can be calculated by software</b>	
<b>Cycle</b>	<b>Max cycles</b>	65535
	<b>Max steps in each cycle</b>	255
	<b>Max cycle nest</b>	4
<b>Protection</b>	<b>Safety protection</b>	Power-off data protection
		Off-line operation mode
		User-defined protection conditions, such as upper and lower limited current/voltage, delay time, temperature, etc.
<b>Data acquisition method</b>		Kelvin connection
<b>Database</b>		MySQL
<b>Data export</b>		Xls, txt, PDF, Graph/Plot
<b>Communication</b>		Ethernet
<b>Channels</b>		8
<b>Dimensions</b>		48*33*13 ( cm )
<b>Clamps</b>		204 Air-plug, Polymer or alligator available
<b>Operating system</b>		Windows 7/10 64 bit for the best
Operation and storage environment requirement		
Items	Values	
<b>Operation environment temperature</b>	0°C~40°C (When the temperature is 25 $\pm$ 10°C, the accuracy error caused by temperature change is less than50ppm /°C)	
<b>Storage environment temperature</b>	-10°C~50°C	
<b>Operation environment humidity</b>	$\leq 70\%$ RH(no moisture condensation)	
<b>Storage environment humidity</b>	$\leq 80\%$ RH(no moisture condensation)	