



Technical Specification Document

BTS-5V100A Battery Tester				
Type:	BTS-5V100A	Battery Tester	CT-8002	5V100A-NTFA
Subject		Index		
Input AC		AC 220V±10% / 50Hz		
Input Power		1772 W		
Resolution		AD: 16bit; DA: 16bit		
Input Impedance		≥100kΩ		
Voltage	Per Channel Range	0.025V~5V		
	Minimum Discharge Voltage	0V		
	Accuracy	± 0.05% of FS		
	Stability	± 0.05% of FS		
Current	Current range per channel	Range1: 10A; Range2: 20A; Range3: 30A; Range4: 40A;		
	Accuracy	± 0.05% of FS		
	CV cut-off current	Range1: 0.02A; Range2: 0.04A; Range3: 0.06A; Range4: 0.08A;		
	Stability	± 0.05% of FS		
Power	Output/ per channel	500	W	
	Stability	± 0.1% of FS		
Time	Current Response Time	Maximum rising time:10ms (10% to 90% of FS)		
	Working Step Time	≤(365*24)h/step Time format-00: 00: 00.000(h、m、s、ms)		
Data Recording	Data Recording condition	Maximum rising time: 10ms		
		Minimum voltage change: 10mV		
	Minimum current change: Range1: 0.02A; Range2: 0.04A; Range3: 0.06A; Range4: 0.08A;			
Frequency	100Hz			



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Charging	Charge Modes	Constant Current Charging、Constant Voltage Charging、Constant current constant voltage charging、Constant power charging
	Cut-off condition	Voltage、Current、Time、Capacity、 $-\Delta V$
Discharging	Discharging Modes	Constant current discharging、constant power discharging、Constant resistance discharging
	Cut-off condition	Voltage、Current、Time、Capacity
Pulse	Charge	Constant current、constant power
	Discharge	Constant current、constant power
	Mini Pulse Width	500ms
	Pulse Counts	Every single steps can be up to 32 different pulses
	Chg and Dischg Switch	Flexible switching mode between charging and discharging
	Cuff-off condition	Voltage, Time
Simulation	Charge Modes	Current,Power
	Discharging Modes	Current,Power
	Cut-off condition	Time, step line
	Chg and Dischg Switch	Flexible switching mode between charging and discharging
	Simulation lines limit	10 Thousand Rows
DCIR Test	Supported	
Cycle	Range	1~65535 times
	Maximum Steps per	254
	Nested Loop	Nested loop Function, MaxSupport 3 Layers
Protection	<ul style="list-style-type: none"> ● Power-off data protection ● Anti-reverse connection, Off-line operation mode ● User-defined protection conditions, such as upper and lower limited current/voltage, delay time, temperature, etc. ● With anti-reverse function 	







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IP Protection	Protection level: IP20	
Channel Feature	Independent pairs of closed loop for constant voltage and constant current	
Channel Control mode	Independent Control	
Data Acquisition Method	Kelvin Connection	
Noise	<75dB	
Database	MySQL	
Communication	TCP/IP	
Operating System	Windows 7/8/10 64bit	
Data Export	Plain text, xls, pdf, plot/graph	
Disk Drive	500GB	
Communication Port	Ethernet Port	
Channels per Unit	2	
Dimension (W*D*H)(mm)	12U (19") , 600*600*740	
Equipment Working Environment		
Items Values		
Operating Environment Temperature	0°C~40°C (When the temperature is 25±10°C, the accuracy error caused by temperature change is 50ppm/°C)	
Storage Temperature	-10°C~50°C	
Environment Humidity (Operating)	≤70% RH(no moisture condensation)	
Environment Humidity (Storage)	≤80% RH(no moisture condensation)	
Aux Channels	Aux Types	Temperature, Voltage
	Temperature range	-25°C~110°C (thermistor)
The aux channel (Plus 100K input resistance)	Temperature Accuracy	±1°C(cable length within 2 meter)
	Temperature Resolution	0.1°C
	Voltage Range	0V~5V
	Voltage Accuracy	± 0.1% of FS



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Temperature auxchannels for each main channel	Up to 248		
Voltage auxchannels for each main channel	Up to 248		
Protection setting for aux Channels	Temperature up-limit, bottom-limit; Voltage up-limit, bottom-limit; ΔV of single cell by temperature change is 50ppm / $^{\circ}C$)		
Clamps Type			
	Alligator	Polymer	Ring connector
Tester Pictures			
	For reference only		