



D1000 Series

Battery Pack Charge-Discharge Test Power Supply

Power Introduction

Based on the field of power electronics, D1000 Series Battery Pack Charge-discharge Test Power Supply is a bidirectional DC source integrating software simulation algorithm, measurement and control technologies. High voltage and current control accuracy. Low ripple output and fast current response. Can be used to test battery pack on charge-discharge performance, providing a versatile evaluation result including capacity, DC internal resistance, cycle life test, and battery temperature etc. Vastly applied by battery companies, OEMs, and labs



Support Customized Test Conditions by Editable Work Steps



Support Work Condition Simulation Test Based on Data Import



Support DBC File Import & Communication With All Sorts of BMS



DC Internal Resistance Test



Data Processing & Analytics



Support Extended Device Integration Control & Display

Product Advantages

- Wide voltage & current output.
- High accuracy & resolution.
- High dynamic response in 2ms.
- Multi-filter solution, current ripple $\leq 0.2\% \cdot FS$.
- Available with ripple overlaying function (optional).
- Support energy recovery to the grid at full power range, with power factor ≤ 0.99 .
- Standard communication interfaces including RS485, CAN & LAN.



Specifications

Model	Rated Power [kW]	Single-channel Power[kW]	Single-channel current[A]	Voltage range[V]	Channel number
D1000-G-60-200-300-2-EBD	60kW	60kW	300A	5-200V	2
D1000-G-120-200-300-2-EBD	120kW	60kW	300A	5-200V	2
D1000-G-200-500-200-2-EBD	200kW	100kW	200A	10-500V	2
D1000-G-150-800-300-EBD	150kW	150kW	300A	24-800V	1
D1000-G-300-800-500-2-EBD	300kW	300kW	500A	24-800V	2
D1000-G-450-800-300-2-EBD	450kW	240kW	300A	24-800V	2
D1000-G-250-1000-500-EBD	250kW	250kW	500A	24-1000V	1
D1000-G-250-1000-400-2-EBD	250kW	250kW	400A	24-1000V	2
D1000-G-300-1000-500-2-EBD	300kW	300kW	500A	24-1000V	2
D1000-G-350-1000-400-2-EBD	350kW	350kW	400A	24-1000V	2
D1000-G-400-1000-800-2-EBD	400kW	400kW	800A	24-1000V	2
D1000-G-500-1000-300-2-EBD	500kW	300kW	300A	24-1000V	2
D1000-G-500-1000-600-2-EBD	500kW	500kW	600A	24-1000V	2
D1000-G-500-1000-800-2-EBD	500kW	500kW	800A	24-1000V	2
D1000-G-600-1000-300-2-EBD	600kW	300kW	300A	24-1000V	2
D1000-G-600-1000-800-2-EBD	600kW	600kW	800A	24-1000V	2
D1000-G-300-1600-300-2-EBD	300kW	300kW	300A	24-1600V	2
D1000-G-450-1600-300-EBD	450kW	450kW	300A	24-1600V	1
D1000-G-450-1600-300-2-EBD	450kW	450kW	300A	24-1600V	2
D1000-G-600-1600-300-2-EBD	600kW	480kW	300A	24-1600V	2

Notes: The voltage and current ranges in the above table can be customized according to customer needs.

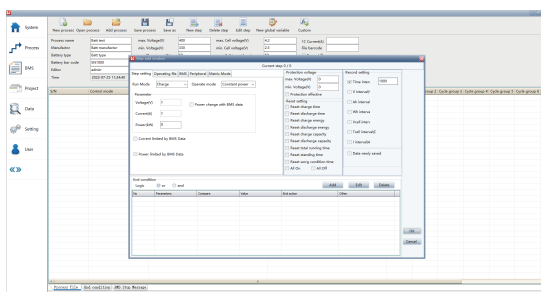
Input Characteristics	
Voltage Accuracy	± 0.1% FS
Current Accuracy	± 0.1FS
Current Rise/Fall Time	≤5ms (0%-90%)
Charge-discharge Switching Time	≤10ms (-90%-90%)
Main Channel Data Acquisition Speed	10ms
Current Ripple(rms)	≤0.2%-FS
Voltage Resolution	0.001V
Current Resolution	0.001A
Power Resolution	0.001kW
Protection	OVP/OCP/OTP/Phase Loss/Emergency Stop, etc.

Input Requirements		Feedback Characteristics	
Phase	3φ3W+PE	Energy Recovery	Energy recovery is available in full power range
Voltage	400V ±10%	iTHD	≤3%
Frequency	50Hz±5Hz	PF	≥0.99

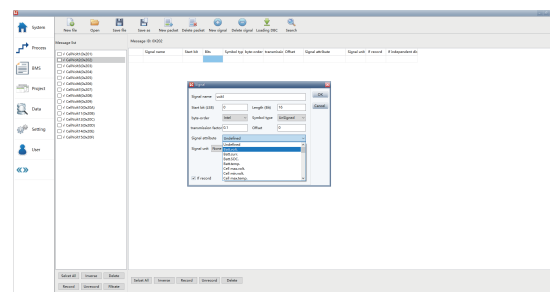
Communication Interfaces / Control Program		Safety & Ambient Conditions	
Local Interface	LCD	Insulation Resistance	≥20MΩ(500Vdc)
Remote Communication ^{*2}	RS485/LAN /CAN	Voltage Withstand	3000Vdc(60s/no arcing/break down)
Others	External Emergency Stop/Fault Signal/Voltage Compensation	Cooling	Air cooling
Work Steps	≥9999	Ambient Temperature	-10 ~ 40°C
Cycle Index	≥9999	Relative Humidity	0-90%RH (Non-condensing at 25°C)
Loop Testing	≤10 layers	Altitude	≤2000m

Note: Remote control and operation over the equipment is possible with upper computer software. Integration of water-cooling system and environmental chamber is possible.

Software Interfaces



Work Step Configuration



DBC File Import