

S7000H Regenerative DC Source-Load Power System



- Bidirectional DC source
- Regenerative electric load
- PV Array IV Simulation
- Battery charge-discharge
- Battery simulation
- Parallel operation

Summary

S7000H is a high precision DC power system supporting dual mode—source and load—with energy regenerative feature. (1) As a DC source, it supports dual quadrant energy flow; (2) As an electronic load, it supports energy recovery to the grid. Highly efficient in switching modes, featuring high power density. 3U-sized dimension enables it to power up to 30kW and output voltage up to 2000V. Support parallel operation of multiple machines. Human-computer interface is engineered to suit all your needs by offering two choices, colorful touchscreen and knob. Can be applied in battery testing, battery storage inverter testing, electronic testing of EV etc. A comprehensive test solution to versatile types of products with highly effective and robust result.

Advantages

- Voltage output range: 0-2000V (up to 2250V)
- Support parallel operation of 20 machines (or more).
- Unique design for human-computer interface: knob and colorful touchscreen.
- Smooth switching between DC source mode and load mode.
- Bidirectional energy flow supporting energy recovery to the grid.
- High power density: 30kW in 3U
- High precision voltage and current output. Low ripple.
- Standard communication interfaces: RS485/CAN/LAN/USB
- Comprehensive protection including OCP/OVP/OPP/OTP/input protection/island protection etc.

HEFEI KEWELL POWER SYSTEM CO., Ltd.

China Headquarter Taiwan Branch Korea Branch Germany Branch sales2@kewell.com.cn
 We are constantly searching for international business partners! Visit our web: www.kewelltest.com

Specifications

型号		S7000H-7K5 -750-0040	S7000H-15K -750-0080	S7000H-21K -750-0120	S7000H-15K -1500-0040	S7000H-21K -2000-0040	S7000H-30K -2000-0040
Rated Values	Voltage	750V	750V	750V	1500V	2000V	2000V
	Current	40A*1	80A	120A	40A*1	40A*1	40A*1
	Power	7.5kW	15kW	21kW	15kW	21kW	30kW
Display Resolution	Voltage	0.01V			0.1V		
	Current	0.01A					
	Power	1W					
Precision	Voltage	≤0.05%F.S.					
	Current	≤0.1% F.S.					
Line Regulation	Voltage	≤0.02%F.S.					
	Current	≤0.02%F.S.					
Load Regulation	Voltage	≤0.05%F.S.					
	Current	≤0.05%F.S.					
Ripple	Vpp (20MHz)	<1000mV			<3000mV		
	Voltage (rms)	<200mV			<400mV		
	Current (rms)	<35mA	<100mA		<35mA		
Slew Rate	Voltage (no load)	0.001V/ms ~ 80V/ms			0.001V/ms ~ 200V/ms		
	Voltage (full load)	0.001V/ms ~ 30V/ms			0.001V/ms ~ 90V/ms		
	Current (no load)	0.001A/ms ~ 20A/ms					
	Current (full load)	0.001A/ms ~ 10A/ms					
Dynamic Response Time		<1ms*2					
AC Input	Voltage	342VAC~528VAC					
	Frequency	47Hz~63Hz					
Efficiency		≈95%					
Power Factor		>0.99					
Protection		OVP/OCP/OPP/OTP/Anti-islanding protection					
Communication Interface		RS485/LAN/CAN/USB/Others (custom)					
Ambient Temperature		0 ~ 40°C					
Dimensions		733mm(D) x 445mm(W) x 132.5mm(H)					
Weight		≈40kg	≈45kg	≈50kg	≈45kg	≈50kg	

注：*1: Up to 70A *2: 10%-90% Load

Proven Test Curve



Seamless current switching in dual quadrant



Start-up at constant-voltage mode