

PROGRAMMABLE DC ELECTRONIC LOAD

150W~300W

BRIEF INTRODUCTION

- HP8XXX Series DC Electronic Load is high precision programmable DC electronic load controlled by high performance microprocessor. Adopt 3.5-inch TFT true color LCD display, Chinese and English menu.
- There are 4 basic working modes (CC/CV/CR/CW) and 10 functional modes.
- With comprehensive protection, overheat protection, overcurrent protection, over power protection, overvoltage protection, loop oscillation protection. Built-in interface, RS232, LAN, USB and analog interfaces for remote control and data acquisition and analysis

FEATURES

- CV/CC/CR/CW Mode
- LED mode, real simulating LED loading
- Battery test function, capacity test
- Up to 50KHz dynamic loading mode
- Test resolution up to 0.1mV 0.01mA
- Voltage and current ripple real-time test
- Transient waveform capture (2uS)
- TIMING test function
- Load regulation test function
- Over current protection (OCP mode)
- Fastest current rate up to 3A/uS
- Standard RS232/485, LAN, USB communication interface
- Support SCPI, MODBUS communication protocol

APPLICATION

Solar power charger
Switching power supply
LED driver
Cell phone battery

UPS
Vehicle electronics
Power battery
Fuse

Application	Test Product	Test Content
Vehicle electronics	Radio, car heated seat	Current
	Car door and window switch	Stability and aging
	Car MCU control box	Stability and aging
Battery	Cell phone battery	Discharge test
	Car battery	Discharge test
	Solar battery	Discharge test
	Mobile power	Discharge test
Power supply	Power module, power supply	Performance Testing
	CV,CC power supply	Performance Testing
	Switching power supply	Performance Testing
	Medical power supply	Performance Testing
	Military, scientific research power supply	Performance Testing
	UPS	Performance Testing
LED	Various types of chargers	Performance Testing
	LED Driver	Stability testing
Power electronics	MOSFET, IGBT	Performance Testing
	Capacitor, rectifier	Performance Testing
	PFC module	Performance Testing
Fuse	Various types of fuses	Fuse time test



TEST MODE

Normal mode



Extended mode



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SPECIFICATION

Model	HP8151- L		HP8151		HP8151B		HP8201	
Input voltage	15V	150V	15V	150V	50V	500V	15V	150V
Input current	3A	30A	3A	30A	1.5A	15A	3A	30A
Input power	150W					200W		
Minimum operating voltage	1.5V@30A				7.5V@15A		1.5V@30A	
Minimum full -range current climb time	10us				25us		10us	
CV Mode								
Range	15V	150V	15V	150V	50V	500V	15V	150V
Resolution	0.2mV	2m	0.2mV	2mV	0.7mV	7mV	0.2mV	2mV
Accuracy	±(0.05%+0.025%FS)							
CC Mode								
Range	3A	30A	3A	30A	1.5A	15A	3A	30A
Resolution	0.04mA	0.4mA	0.04mA	0.4mA	0.02mA	0.2mA	0.04mA	0.4mA
Accuracy	±(0.05%+0.05%FS)							
CR Mode								
Range	0.03Ω~50k Ω		0.03Ω~50k Ω		0.1Ω~333k Ω		0.04Ω~50k Ω	
Resolution	16Bits							
Accuracy	±0.1%							
CW Mode								
Range	150W					200W		
Resolution	16Bits							
Accuracy	± (0.1%+0.1%FS)							
LED Mode								
Bandwidth	-----		> 100kHz					
Rd coefficient	-----		0.001~1					
Dynamic Mode								
Ta & Tb	10uS~50s							
Minimum resolution	10us							
Maximum rise/fall slope	3A/us		3A/us		0.6A/us		A/us	
Voltage Readback Value								
Range	15V	150V	15V	150V	50V	500V	15V	150V
Resolution	0.1mV	1mV	0.1mV	1mV	0.3mV	3mV	0.1mV	1mV
Accuracy	±(0.025%+0.025%FS)							
Current Readback Value								
Range	3A	30A	3A	30A	1.5A	15A	3A	30A
Resolution	0.02mA	0.2mA	0.02mA	0.2mA	0.01mA	0.1mA	0.02mA	0.2mA
Accuracy	±(0.05%+0.05%FS)							
Ripple Readback Value								
Range (R/I)	150V/30A		150V/30A		500V/15A		150V/30A	
Bandwidth	10Hz~250kHz							
Accuracy	±1%							
Protection Range								
Overpower protection bandwidth	158W					210W		
Overcurrent protection	32A				16A		32A	
Overvoltage protection	158V				525V		158V	
Over temperature protection	≈85℃							
Dimensions								
Size (L*W*H)	358mm*214mm*88mm							
Net Weight (Kg)	3.8Kg HP8201: 4.7 Kg							

ACCESSORY



RS232 communication cable

AC power cord

External trigger connector

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M odel	HP8201B		HP8301		HP8301B		HP8301C	
Input voltage	50V	500V	30V	150V	50V	500V	15V	150V
Input current	1.5A	15A	3A	30A	1.5A	15A	6A	60A
Input power	200W		300W					
Minimum operating voltage	6.5V@15A		1V@30A		4V@15A		1.5V@60A	
Minimum full -range current climb time	10us		10us		10us		10us	
CV Mode								
Range	50V	500V	30V	150V	50V	500V	15V	150V
Resolution	0.7mV	7mV	0.2mV	2mV	0.7mV	7mV	0.2mV	2mV
Accuracy	±(0.05%+0.05%FS)							
CC Mode								
Range	1.5A	15A	3A	30A	1.5A	15A	6A	60A
Resolution	0.02mA	0.2mA	0.04mA	0.4mA	0.02mA	0.2mA	0.09mA	0.9mA
Accuracy	±(0.05%+0.05%FS)							
CR Mode								
Range	0.1Ω~333kΩ		0.06Ω~50k Ω		0.12Ω~333kΩ		0.01Ω~25k Ω	
Resolution	16Bits							
Accuracy	±0.1%							
CW Mode								
Range	200W		300W					
Resolution	16Bits							
Accuracy	± (0.1%+0.1%FS)							
LED Mode								
Bandwidth	More than 100kHz							
Rd coefficient	0.001~1							
Dynamic Mode								
Ta & Tb	10us~50s							
Minimum resolution	10us							
Maximum rise/fall slope	A/us		0.0006~1.5A/us		A/us		A/us	
Voltage Readback Value								
Range	50V	500V	15V	150V	50V	500V	15V	150V
Resolution	0.3mV	3mV	0.1mV	1mV	0.3mV	3mV	1mV	0.1mV
Accuracy	±(0.025%+0.025%FS)							
Current Readback Value								
Range	1.5A	15A	3A	30A	1.5A	15A	6A	60A
Resolution	0.01mA	0.1mA	0.02mA	0.2mA	0.01mA	0.1mA	0.04mA	0.4mA
Accuracy	±(0.05%+0.05%FS)		±(0.05%+0.1%FS)					
Ripple Readback Value								
Range (R/I)	500V/15A		150V/30A		500V/15A		150V/60A	
Bandwidth	10Hz~250kHz							
Accuracy	±1%							
Protection Range								
Overpower protection bandwidth	210W		315W					
Overcurrent protection	16A		32A		16A		63A	
Overvoltage protection	525V		158V		525V		158V	
Over temperature protection	≒85℃							
Dimensions								
Size (L*W*H)	358mm*214mm*88mm							
Net Weight (Kg)	4.7 Kg							

ACCESSORY



RS232 communication cable



AC power cord



External trigger connector



CKT Changzhou
ChuangKai Electronic Co.Ltd