JBZ8465-600-20

Wide range programmable DC power supply

Characteristic

- Unit range:

  Voltage: 0 ~ 600V,

  Current: 0 ~ 20A ,

  Power: 6.5kW;
- High precision voltage and current control and measurement;
- High stability: low linear adjustment rate, low load adjustment rate, low ripple, low noise;
- Fast response: transient response of 1ms typical value;
- Slope control: can quickly and accurately control the voltage (or current) rise and fall;
- PFC control: input power factor greater than 0.98;
- Cascade function: support master-slave parallel mode, like the operation of a single power supply to operate the entire cascade;
- Sequence function: Powerful and flexible sequence function, can simulate complex waveform output;
- Quick call: press the digital key to directly call the saved voltage and current parameters;
- Provide a composite signal port with powerful signal monitoring capabilities (optional) :

  Analog programming: control output voltage and output current through analog quantity;

  External control: open or close the output through the external digital signal, and the external output digital control number;

  Monitoring output: the output waveform of voltage and current is output in the form of analog quantity, easy to monitor;
- Remote compensation: compensate the voltage difference caused by the current to ensure the measured value of the voltage at the load end;
- Power-off save: the configuration parameters of the power supply automatically restore to the state when the last shutdown;
- Standard feature rich "JBZ power product demonstration platform" software;
- Communication port: standard RS232 and LAN communication port, optional GPIB, RS485, CAN;
- Communication protocol: Support SCPI, Modbus protocol;

  Display operation: TFT color display, support Chinese and English
- display, convenient and quick key operation;
- Protection function: OVP, OCP, OPP, OTP, LVP, SHUT, FAULT, ALTER and other comprehensive protection function.
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Summary

JBZ8400 series wide range programmable DC power supply is a high performance DC power supply developed by JaBaZ tech. It has the advantages of wide output range, high current, low ripple noise, fast transient response, high resolution, high precision, and the voltage current slope can be set.

JBZ8400 series product line is rich, including 48 different models, 5 power levels, voltage range from 10V to 1500V, it is the best choice for ATE system integration, laboratory testing, vehicle equipment testing, superconducting testing, motor testing, battery charging simulation, voltage and current sensor calibration, laser testing and power supply, electronic product life cycle testing and other applications.

Application fields

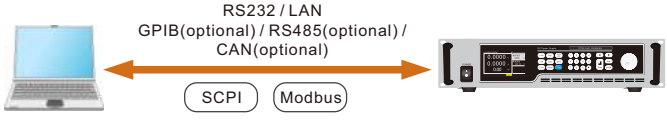
- Multi-specification flexible application of power electronics laboratory;
- Fuel cell, power battery, lead battery, super capacitor test;
- Simulation of power supply environment of vehicle, airborne and shipboard electronic equipment;
- DC charger, charging pile design and test system integration;
- Server power supply, UPS, inverter design and test;
- Solar energy, wind energy, energy storage design and testing;
- Uav, laser, sensor field power supply and design test.

High precision measurement function

JBZ8400 series built-in 16bits high precision A/D converter, voltage 0.05%F.S., current 0.1%+0.1%F.S. The measurement accuracy of JBZ8400. The measurement values of voltage, current and power can be displayed on the display screen of the front panel of the power supply at the same time. In addition, JBZ8400 provides additional voltage and current monitoring output function, the user can monitor the output waveform of voltage and current through the oscilloscope by monitoring the output terminal.

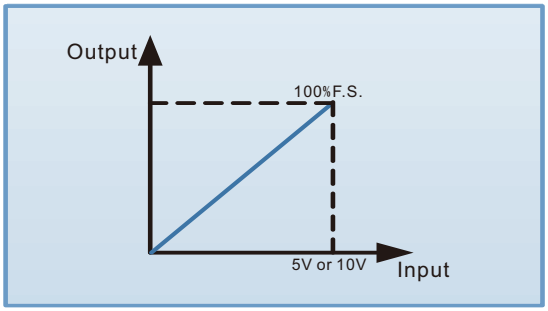
Multi-interface and multi-protocol

The JBZ8400 series is equipped with multiple communication interfaces, and supports SCPI and Modbus two communication protocols. The user can configure it in the menu according to the needs, which makes the system integration more flexible.



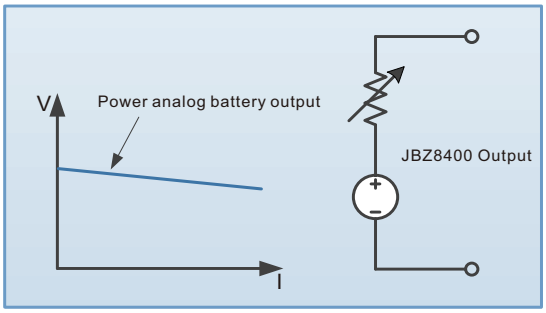
Analog programming capabilities

JBZ8400 series has two analog input ports, voltage programming and current programming, which can respectively control the output voltage and output current. The analog programming signal can choose 0 ~ 5V or 0 ~ 10V DC voltage signal. The programming signal corresponds to the output voltage and output current of 0 ~ 100%F.S.



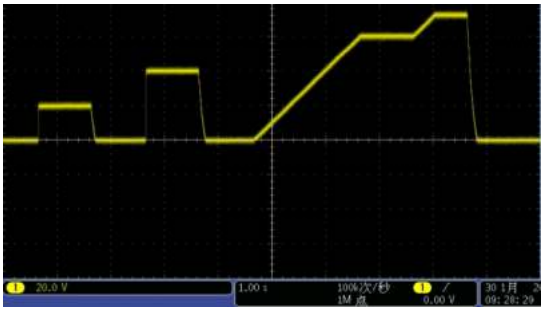
Battery internal resistance simulation function

JBZ8400 series power supply with battery internal resistance analog output function, when the output current of the power supply increases, the output voltage can be adjusted according to the user's preset internal resistance value.



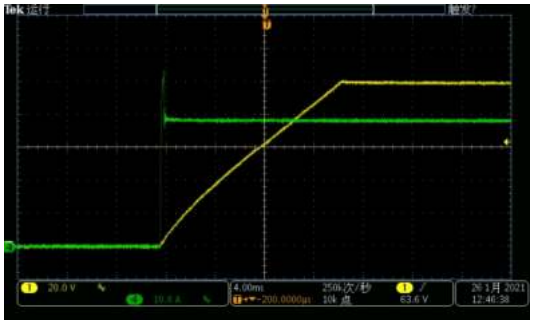
Serial function

The sequence function allows users to edit their own voltage and current waveforms. The JBZ8400 series offers 10 sequence files, each supporting up to 100 run steps. In the run steps, you can set the output voltage, output current, and delay. Sequence function support, support cycle, link and other attributes, to facilitate the realization of complex waveform output.

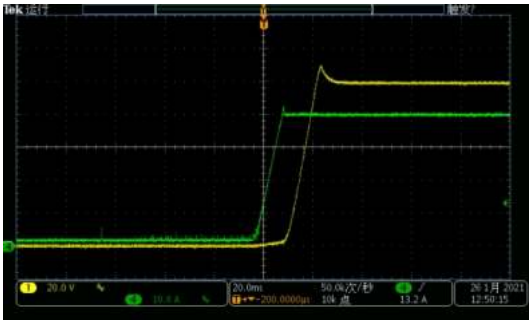


CV, CC is preferred

When the power output is connected to the inductive or capacitive load, the output current or voltage will overshoot to a certain extent, which will trigger the protection of the device under test, or even damage the device under test. JBZ8400 series with CV, CC output priority function to effectively inhibit the output overshoot and the impact.



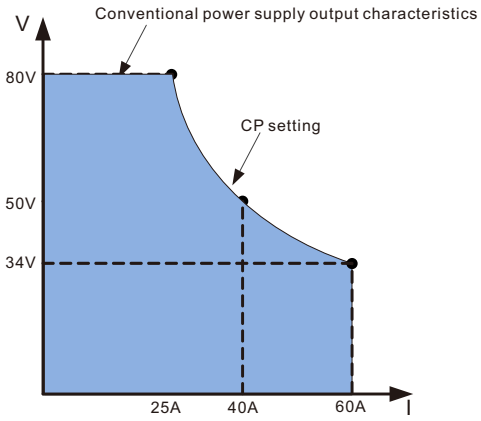
CV priority (high speed build voltage, current overshoot)



CC priority (high speed build current, voltage overshoot)

Constant power, wide range output

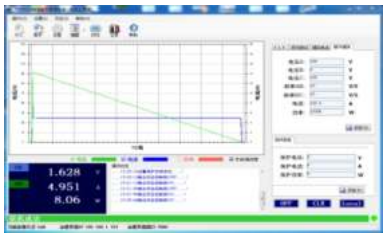
The JBZ8400 series has an output range of over 2.4 times wide range. It can automatically adjust the output voltage and current within the set range to achieve constant power output. CP function for solar photovoltaic simulation test, load stability test and protection safety test to provide help.



JBZ8400 series provides wider operation in constant power range

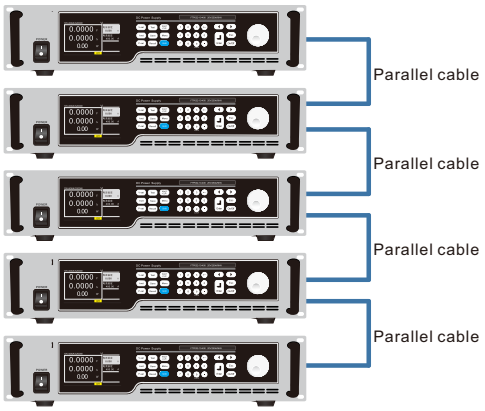
Computer graphical operation software

JBZ8400 series provides a host computer software with virtual instrument function, which can read test data in real time, generate images, export reports, print reports, etc., which is convenient for customers to use.



Multi-machine parallel function

The JBZ8400 power supply supports up to 10 power supplies in parallel, which greatly expands the application output range of the power supply. Parallel function in addition to the automatic load between the power supply, to maintain the output value is consistent, but also to ensure the output slope curve or waveform is consistent. In the parallel state of the host, the power supply screen displays the total voltage, current and power values. Each slave automatically equalizes current and sums automatically.



Ordering information

Model	Specifications	Chassis Dimensions	Model	Specifications	Chassis Dimensions
JBZ8416-16-250	16V/250A/1.6kW	19-inch rack/2U	JBZ8420-300-16	300V/16A/2kW	19-inch rack/2U
JBZ8432-16-500	16V/500A/3.2kW	19-inch rack/2U	JBZ8432-300-16	300V/16A/3.2kW	19-inch rack/2U
JBZ8465-16-1000	16V/1000A/6.5kW	19-inch rack/4U	JBZ8465-300-32	300V/32A/6.5kW	19-inch rack/4U
JBZ8420-40-120	40V/120A/2kW	19-inch rack/2U	JBZ8420-600-10	600V/10A/2kW	19-inch rack/2U
JBZ8432-40-120	40V/120A/3.2kW	19-inch rack/2U	JBZ8432-600-10	600V/10A/3.2kW	19-inch rack/2U
JBZ8465-40-240	40V/240A/6.5kW	19-inch rack/4U	JBZ8465-600-20	600V/20A/6.5kW	19-inch rack/4U
JBZ8420-50-110	50V/110A/2kW	19-inch rack/2U	JBZ8420-800-8	800V/8A/2kW	19-inch rack/2U
JBZ8432-50-110	50V/110A/3.2kW	19-inch rack/2U	JBZ8432-800-8	800V/8A/3.2kW	19-inch rack/2U
JBZ8465-50-220	50V/220A/6.5kW	19-inch rack/4U	JBZ8465-800-16	800V/16A/6.5kW	19-inch rack/4U
JBZ8420-80-60	80V/60A/2kW	19-inch rack/2U	JBZ8420-1200-5	1200V/5A/2kW	19-inch rack/2U
JBZ8432-80-60	80V/60A/3.2kW	19-inch rack/2U	JBZ8432-1200-5	1200V/5A/3.2kW	19-inch rack/2U
JBZ8465-80-120	80V/120A/6.5kW	19-inch rack/4U	JBZ8465-1200-10	1200V/10A/6.5kW	19-inch rack/4U
JBZ8420-160-30	160V/30A/2kW	19-inch rack/2U	JBZ8420-1500-3.5	1500V/3.5A/2kW	19-inch rack/2U
JBZ8432-160-30	160V/30A/3.2kW	19-inch rack/2U	JBZ8432-1500-3.5	1500V/3.5A/3.2kW	19-inch rack/2U
JBZ8465-160-60	160V/60A/6.5kW	19-inch rack/4U	JBZ8465-1500-7	1500V/7A/6.5kW	19-inch rack/4U

General Specification Table

General specification table	
Items	Parameters
Input	190VAC ~ 265VAC, frequency: 47Hz ~ 63Hz, PF: 0.98(Typical)
Efficiency	0.9(Typical)
Transient response	Typical value 1ms, load change 50%, time required for voltage to return to accuracy range
Cascade	Supports power expansion in master/slave mode
Communication interface	RS232 and LAN, optional: GPIB, RS485, CAN,USB
Operating temperature	0℃～40℃
Storage temperature	-20℃～70℃
Use altitude	＜2000m

Specification table

Model	JBZ8465-600-20
Voltage	0～600V
Current	0～20A
Power	6500W
Voltage programming	
Resolution	16Bits
Accuracy	0. 05%F. S.
Current programming	
Resolution	16Bits
Accuracy	0. 1%+0. 1%F. S.
External analog programming	
Control voltage	0～5V or 0～10V corresponds to 0～100%F. S.
Voltage accuracy	0. 2%F. S.
Current accuracy	0. 5%F. S.
Analog outputs	
Output voltage	0 ~ 100%F.S corresponds to 0 ~ 10V.
Voltage accuracy	0. 5%F. S.
Current accuracy	0. 5%F. S.
Linear adjustment rate	
Voltage	0. 01%+0. 01%F. S.
Current	0. 02%+0. 01%F. S.
Loads adjustment rate	
Voltage	0. 01%+0. 05%F. S.
Current	0. 02%+0. 1%F. S.
Voltage measurement	
Resolution	16Bits
Accuracy	0. 05%F. S.
Current measurement	
Resolution	16Bits
Accuracy	0. 1%+0. 1%F. S.
Output noise & ripple	
Voltage ripple (p-p)	300mV
Voltage ripple (rms)	60mV
Rising slope	
Voltage	2V/ms (max)
Current	2A/ms (max)
OVP setting	
Range	0～110%F. S.
Accuracy	1%F. S.
Dimension	430 (W) ×88 (H) ×483 (D) mm （1. 6kW&2kW&3. 2kW ）;
	430 (W) ×177 (H) ×563 (D) mm （6. 5kW ）
Weight	15kg (2kW&3. 2kW Models)； 29kg (6. 5kW Models)