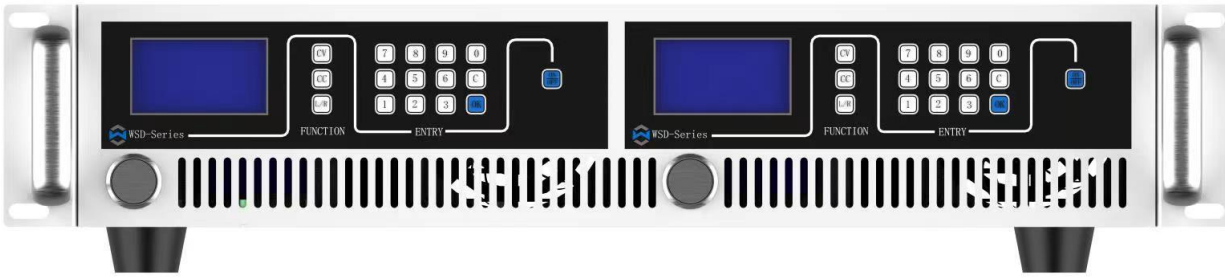


1: Product overview

The SKS-D Series Digital Push-button DC Power Supply Unit is a high-performance DC power supply unit controlled by a microprocessor. This series of products has high accuracy, high accuracy, high stability and other excellent electronic characteristics. It is the best choice for research unit, laboratory as adjustable DC power supply or production line as product life testing power supply. This series of product design has perfect over voltage, over temperature protection line, the product reliability.

2: Product application

1. Test and aging of LED and energy-saving lamps
2. Switch the power supply and the power supply adapter
3. Test and aging of photovoltaic and inverter
4. Aerospace, defense and defense industry
5. Test and aging of electric vehicle motor, controller and DC motor
6. Capacitors, resistors, relays, transistors, sensors and other electronic devices
7. Electrolysis, electroplating, corrosion of aluminum foil processing and other LCD screen, touch screen and other displays
8. Automotive electronics, DC motor, motor controller, cigarette lighter, audio and video test aging, etc

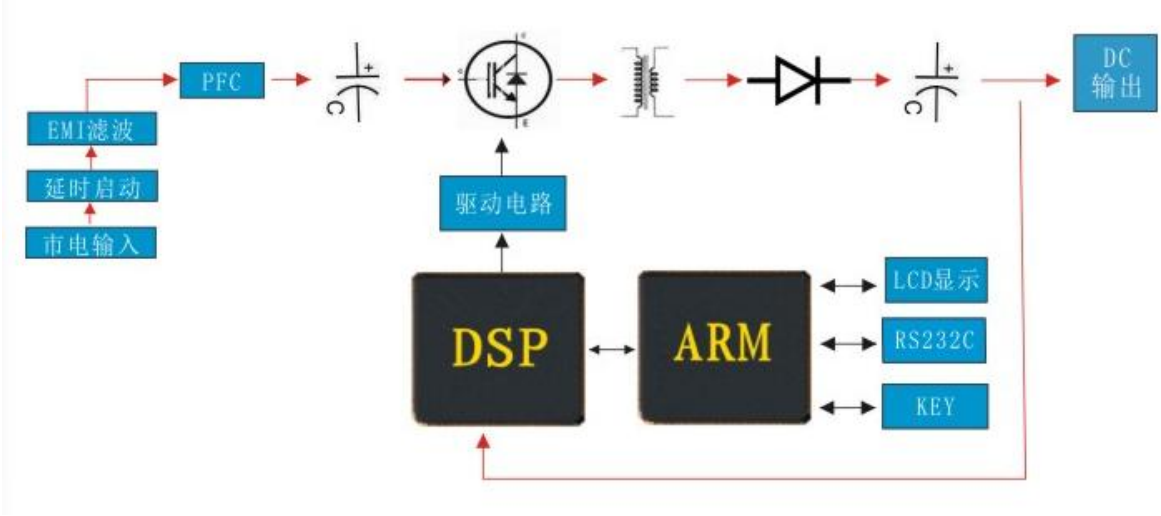
3: Technical parameters

technical parameter	Technical Data	SKS-D series
Communication: power supply	AC:Supply	
– voltage	-Voltage	Single-phase 220VAC ± 10%
– frequency	-Frequency	50-60HZ
– power factor	-Power Factor	> 0.92
DC: voltage	DC:Voltage	
– definition	– Accuracy	<0.2% of the rating value
– A 0-100% load adjustment	– Load regulation 0-100%	<0.05% of the rating value
– ± 10% △ UAC linear	– Line regulation ±10%△UAC	<0.05% of the rating value
– 10-100% load required	– Regulation 10-100% load	< 10ms
– With ad 10-90% rise time	– Rise time 10-90%	< 10ms -10s
– overvoltage crowbar	– Overvoltage protection	
DC: current	DC:Current	
– definition	– Accuracy	<0.3% of the rating + 20 mA
– A 1-100% load adjustment	– Load regulation 1-100%	<0.15% of the rating value
– ± 10% △ linear Uac	– Line regulation ±10%△UAC	<0.05% of the rating value
DC: power	DC:Power	
– definition	– Accuracy	<0.5% of the rating value
defencive function	Protection	Output pressure limit protection, output current limit protection, output power limit protection, temperature protection
Isolation and pressure resistance	Insulation	
-AC input to the enclosure	- AC input to enclosure	1500VDC
-The AC input is to the DC output	- AC input to DC output	1500VDC
-DC output to the housing (PE)	- DC output to enclosure (PE)	500VDC
digital interface	Digital interfaces	RS 485 Or the RS 232
cooling-down method	Cooling	forced air cooling
working temperature	Operation temperature	-5℃-45℃
Storage temperature	Storage temperature	-20℃-60℃
relative humidity	Humidity	<80%, with no condensation
Dimensions (width * height * depth)	Dimensions (W H D)	425*88*420mm
weight	Weight	12KG

4: product selection

model	voltage	current	power	voltage ripple
SKS 3030D	0-30.000V*2	0-30.00A*2	900W*2	Vrms＜0.5%
SKS 3040D	0-30.000V*2	0-40.00A*2	1200W*2	Vrms＜0.5%
SKS5020D	0-50.000V*2	0-20.00A*2	1000W*2	Vrms＜0.5%
SKS6015D	0-60.000V*2	0-15.00A*2	900W*2	Vrms＜0.5%
SKS10H10D	.00-1000V*2	0-10.00A*2	1000W*2	Vrms＜0.5%
SKS20H05D	0-200.00V*2	0-5.000A*2	1000W*2	Vrms＜0.5%
SKS30H03D	0-300.00V*2	0-3.000A*2	900W*2	Vrms＜0.5%

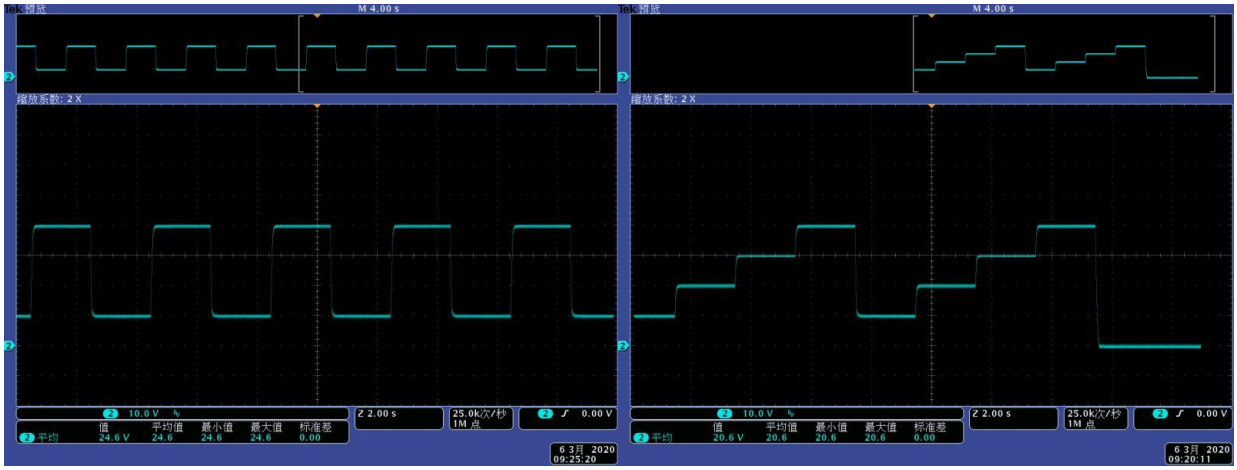
5: working principle

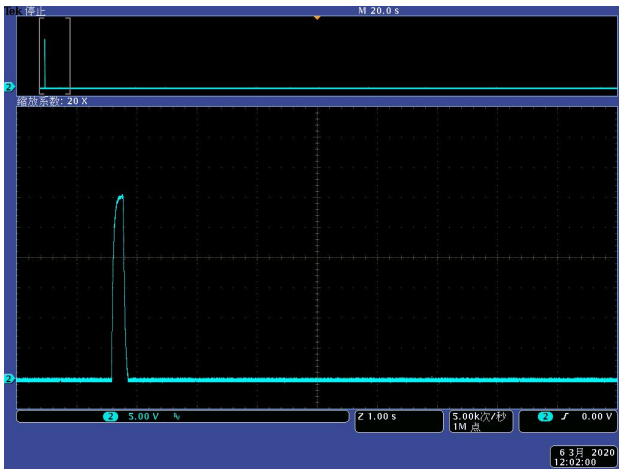


6: product highlights

1. Programming function

The power supply has a programmed output mode, the programmed 10 different sets of parameters, and the number of cycles. Such as setting the initial voltage / current value, termination voltage / current value, holding time and other parameters. At the same time, multi-step continuous output, single-step output and cycle output function can be realized. Different modes such as voltage steps and voltage sequence can be realized. The following figure shows a schematic diagram of several output waveforms.

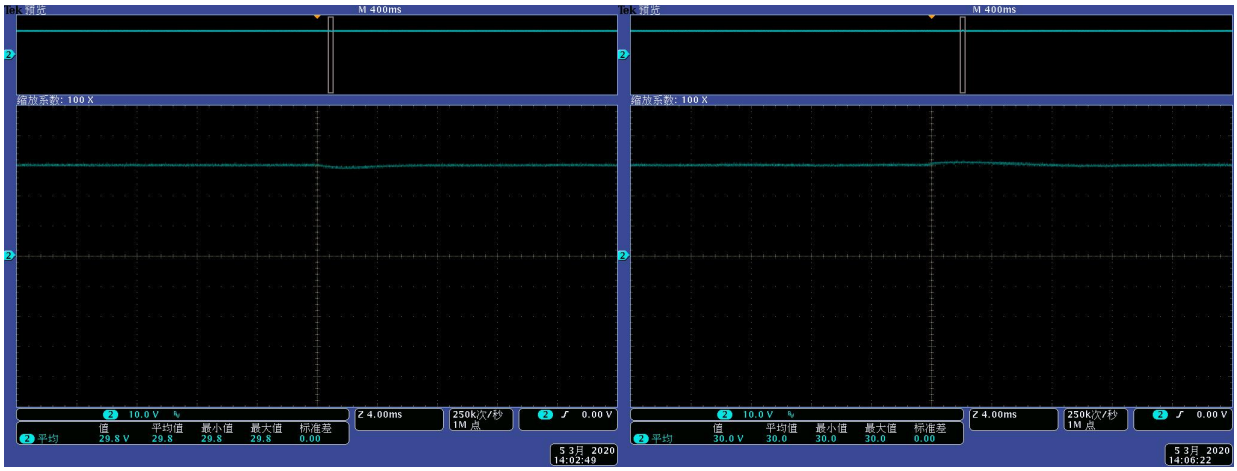




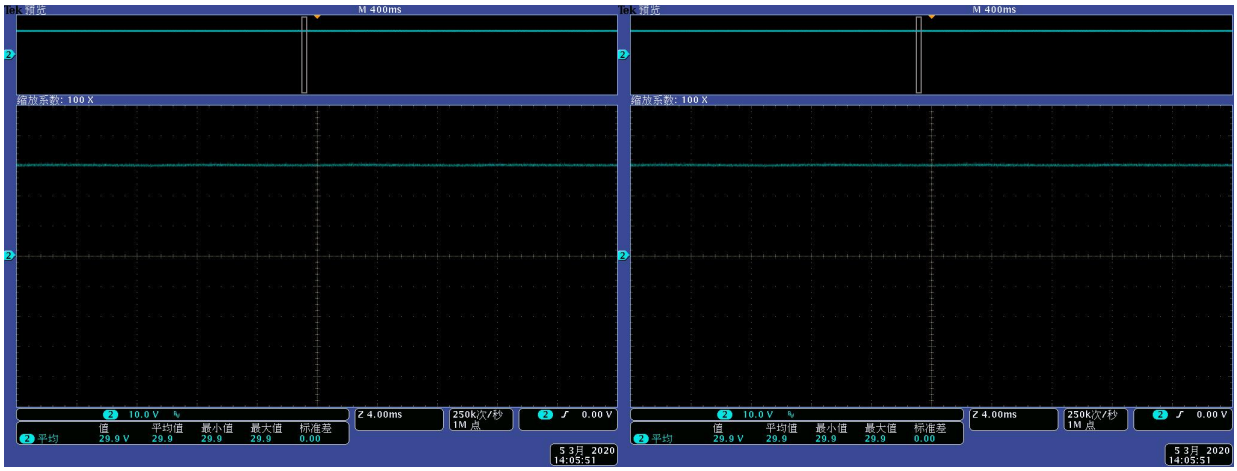
The voltage and current setting range can be set in the full range; the holding time setting range is 1S~10000S; cycle times: 1~65535.

The programming mode can be set on / off through the interface parameters. In the programming mode, the conventional voltage and current parameter setting value is invalid.

2. Excellent dynamic response time

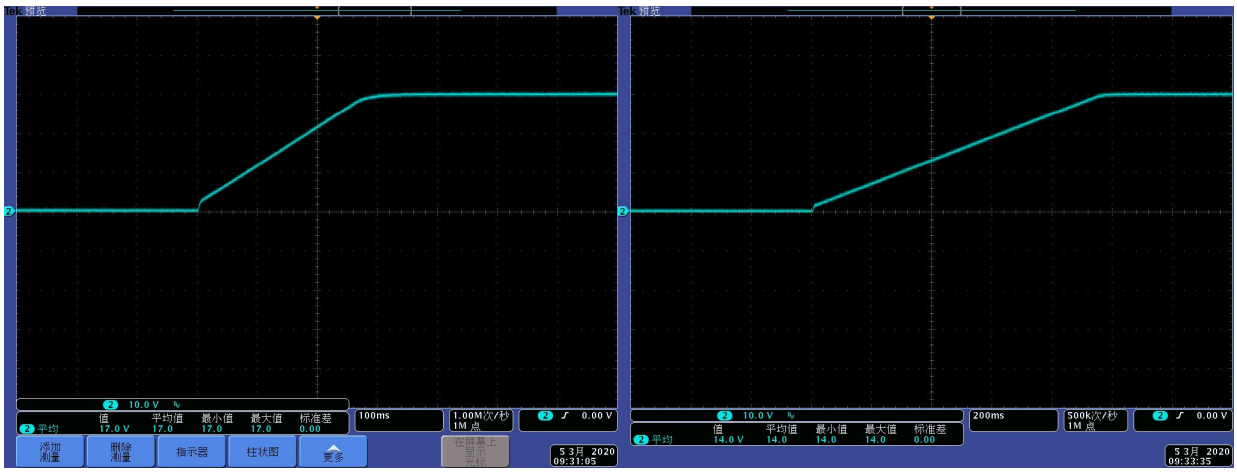


Dynamic response waveform for 10% to 10% load changes and 50% to 50% load changes



Dynamic response waveform changes from 90% to 50% and 50% to 90% waveform load changes

3. The voltage and current have no start impact, and the rising slope of the voltage and current can be set



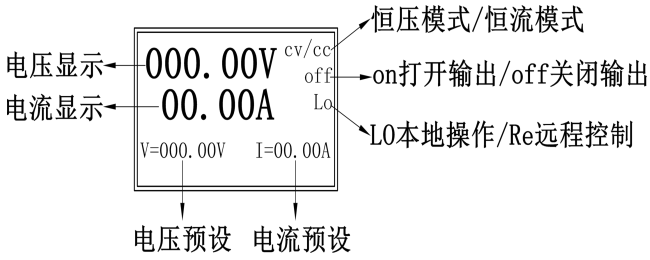
Set 300ms rise time Set 1000ms rise time

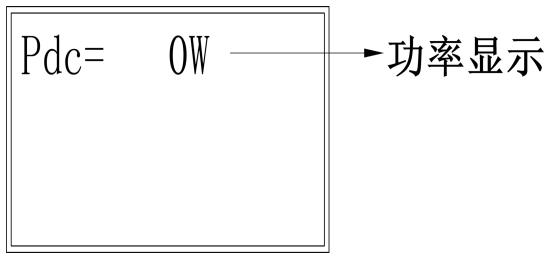
4. High display accuracy:

Voltage display accuracy of 0.2% in CV mode;

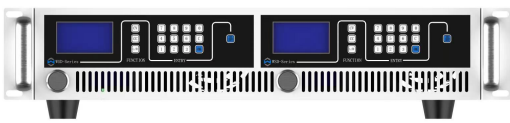
0.3% in CC mode

5. Preset voltage / current value; output voltage / current value; operating mode; local / remote control; start / stop and display in one interface, facilitate customers to monitor the DC power supply status; power supply can realize power display





6. Product pictures



Note: This series of DC power supply voltage low ripple, current and low ripple, can be used as a constant current source

Features of the attached products:

1, the laser process production of the product chassis, so that the chassis details are more perfect
2, the unique paint technology and color matching, so that the DC power supply appearance beautiful and generous
3. All kinds of labels shall be screen printed (except for product labels)
4. Internal PCBA and DIP process to improve product assembly efficiency and reduce human faults
5, the internal structural parts design of the product, so that the product to eliminate the damage caused by transportation
6, product packaging design can also reduce the damage caused by transportation
7. Set up node inspection in the production process to reduce the defective assembly rate
8, QC testing, so that the quality and technical indicators of each power supply are guaranteed
9. Voltage 5, lowest resolution of 1 mV; current 4, lowest resolution of 1 mA
10. This series of DC power supply has the preset functions of voltage and current
11. High display accuracy: voltage display accuracy 0.1% in CV mode; current display accuracy 0.2% in CC mode
12, LCD screen display
13. Preset voltage / current value; output voltage / current value; operating mode; local / remote control; start / stop at one interface to facilitate customers to monitor the DC power supply status
14. The voltage of this series of DC power supply is low ripple, and the current is also low ripple, which can be used as a constant current source
15, the voltage and current have no starting impact, and the rising slope of the voltage and current can be set
16. Excellent dynamic response time
17, standard RS232 & RS485 interface
18, the power supply can realize the power display
Cost-effective, can cater to the high-end application industry
20, each model of products in stock, customers directly pick up the goods
21, the warranty period is 1 year (can be expanded to 3 years), the warranty period can enjoy our company without any cost from the client
22. After-sales response time is less than 2 hours (limited to conventional products)

Product information link: (this series of products only all kinds of electronic information, please ask with our business personnel or agents)

1. Product data
2. Product quick use manual
3. Product quick installation manual
4. Product use instructions
5. ModbusRTU communication protocol