# SPD3000X Series Programmable DC Power Supply





SIGLENT TECHNOLOGIES CO.,LTD

### SPD3303X SPD3303X-E

### **Product Overview**

SPD3000X Series Linear Programmable DC Power Supply has a 4.3 inches TFT\_LCD display, Supports Programmability and Real Time Wave Display, bringing a new experience to users. It has three isolated outputs: two adjustable channels and one selectable channel from 2.5v, 3.3V, and 5V. It also has output short and overload protect function, and can be used in production and development.

### **Main Features**

- 3 independent controlled and isolated output, 32V/3.2A×2, 2.5V/3.3V/5V/3.2A×1, total 220W
- 5 digits Voltage, 4 digits Current Display, Minimum Resolution: 1mV/1mA
- Supports panel timing output functions
- 💵 4.3 inch true color TFT- LCD 480x272 display
- 3 types of output modes: independent, series, parallel
- 100V/120V/220V/230V compatible design to meet the needs of different power grids.
- Intelligent temperature-controlled fan , effectively reducing noise
- Clear graphical interface, with the waveform display function
- Internal 5 groups of system parameter save/recall, supports data storage space expansion
- Provides PC software: Easypower , supports SCPI , LabView driver







### Characteristics

### High-resolution and high-precision output

The highest resolution of 1mV/1mA(SPD3303X), provides excellent setting and read back accuracy. This ensures accurate output even with very with small changes in voltage or current. This is impossible for a low resolution power supply.

### Series/parallel/independent mode function

Series and parallel function allows two channels combined into one output with more power output capability, extending the application range. Each of 3 channels power can be turned on or off independently and also can be turned all on or all off.

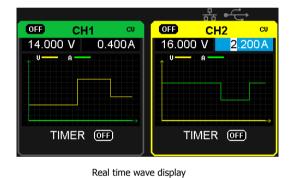




### Panel displays the timing output

Through front panel operation, 5 groups of timing settings and output control can be displayed, which provides users a simple power programming function. Also a connection can be made with Siglent's EasyPower PC software providing a full range of communication and control requirements.

					格	₅∙€	+
OFF	CH1	C	:U	OFF	С	H2	CU
123	4 5		NO	Volt(V)	Curr(A)	Set(S)	Left(S)
		U	1	5.000	0.400	100	100
╻╻┏━			2	10.000	0.800	200	200
		_	3	15.000	1.200	300	300
╏╻╌╌──		A	4	20.000	1.600	400	400
	4 5		5	25.000	2.000	5 <mark>0</mark> 0	500



Panel timing output



SPD3000X series programmable power supply can save or recall 5 groups of setting parameter in internal storage, also supports external storage expansion. You can easily obtain the settings you needed.



Internal Storage



PC Timer

### Specification

Channel     CH1 output voltage: 0 ~ 32V. output current: 0 ~ 3.2A CH2 output voltage: 0 ~ 32V. output current: 0 ~ 3.2A CH2 output voltage: 2.5/3.3/5.0V. output current: 3.2A       Display	Model		SPD3303X-E	SPD3303X				
H3 output voltagie: 2.5/3.3/5.0V. output current ; 3.2ADisplay	Channel		CH1 output voltage: $0 \sim 32V_{2}$ output current: $0 \sim 3.2A$					
Display 4.3 inch true color TFT-LCD 4 digits vortage 3 digits current 4.3 inch true color TFT-LCD 5 digits vortage 4 digits current   Resolution IomV/10mA ImV/1mA   Program Accuracy Voltage ± (0.5% of reading+2digits) Voltage ± (0.03% of reading+10mV)   Current ± (0.5% of reading+2digits) Current ± (0.3% of reading+10mV) Current ± (0.3% of reading+10mV)   Readback Accuracy Voltage ± (0.5% of reading+2digits) Voltage ± (0.03% of reading+10mV)   Constant Voltage Mode Line Regulation \$0.01%+2mV Voltage ± (0.03% of reading+10mA)   ReplaeNoise \$0.01%+2mV Current ± (0.5% of reading+2digits) Current ± (0.3% of reading+10mA)   Mode Line Regulation \$0.01%+2mV Ecode Regulation \$0.01%+2mV   Recovery Time <50.9% (50% load change- minimum load 0.5A)			CH2 output voltage: 0 $\sim$ 32V, $$ output current: 0 $\sim$ 3.2A					
A digits voltage 3 digits current S digits voltage 4 digits current   Resolution InW/InA InW/InA   Program Accuracy Voltage ± (0.5% of reading+2digits) Voltage ± (0.3% of reading+10mA)   Readback Accuracy Voltage ± (0.5% of reading+2digits) Voltage ± (0.3% of reading+10mA)   Readback Accuracy Voltage ± (0.5% of reading+2digits) Voltage ± (0.3% of reading+10mA)   Constant Voltage Line Regulation s0.01%+2mV Current ± (0.5% of reading+2digits) Current ± (0.3% of reading+10mA)   Constant Voltage Line Regulation s0.01%+2mV Current ± (0.3% of reading+10mA)   Recovery Time < 50.01%+2mV								
Program Accuracy     Voltage ± (0.5% of reading+2digits)     Voltage± (0.03% of reading+10mV)       Current ± (0.5% of reading+2digits)     Current ± (0.3% of reading+10mV)     Current ± (0.3% of reading+2digits)     Current ± (0.3% of reading+10mV)       Readback Accuracy     Voltage ± (0.5% of reading+2digits)     Voltage ± (0.03% of reading+10mV)       Constant Voltage     Line Regulation     s0.01%+2mV     Current ± (0.5% of reading+2digits)     Current ± (0.3% of reading+10mV)       Mode     Load Regulation     s0.01%+2mV     Current ± (0.3% of reading+2digits)     Current ± (0.3% of reading+10mV)       Constant Vortage     Load Regulation     s0.01%+2mV     Current ± (0.3% of reading+2digits)     Current ± (0.3% of reading+10mV)       Mode     Load Regulation     s0.01%+2mV     Current ± (0.3% of reading+2digits)     Current ± (0.3% of reading+10mV)       Mode     Load Regulation     s0.01%+2mV     Solon%     Current ± (0.3% of reading+10mV)       Constant Current     Line Regulation     s0.01%+3mV     Solon%     Current ± (0.3% of reading+10mV)       Series Mode     Line Regulation     s0.01%+3mV     Solon%     Current ± (0.4% contage)       Chad Regulation     s0.01%+3mV     Solon%     Solon%	Display							
Current ±Current ±	Resolution		10mV/10mA	1mV/1mA				
Readback Accuracy     Voltage ± (0.5% of reading+2digits)     Voltage ± (0.03% of reading+10mV)       Constant Voltage     Line Regulation     \$0.01%+2mV     Current ± (0.3% of reading+10mA)       Mode     Line Regulation     \$0.01%+2mV     Current ± (0.3% of reading+10mA)       Mode     Line Regulation     \$0.01%+2mV     Current ± (0.3% of reading+10mA)       Mode     Kapple&Noise     \$0.01%+2mV     Current ± (0.3% of reading+10mA)       Repulsion     \$0.01%+2mV     Current ± (0.3% of reading+10mA)       Mode     Line Regulation     \$0.01%+2mV       Recovery Time     <50.01% bad change, minimum load 0.5A)	Program Accuracy		Voltage ± (0.5% of reading+2digits)	Voltage± (0.03% of reading+10mV)				
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Constant Voltage ModeLine Regulation<0.01%+2mVRipple&Noise<300µVrms	Readback Accuracy		Voltage ± (0.5% of reading+2digits)	Voltage± (0.03% of reading+10mV)				
Mode     Load Regulation     ≤0.01%+2mV       Ripple&Noise     <300µ/rms			Current ± $(0.5\% \text{ of reading+2digits})$	$Current \pm (0.3\% of reading + 10 mA)$				
$ \begin{array}{                                    $		Line Regulation	≤0.01%+2mV					
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$ \begin{array}{ c                                   $		Ripple&Noise	≤300µVrms					
Mode     Load Regulation     ≤0.2%+3mA       Ripple&Noise     ≤3mArms       Parallel Mode     Line Regulation     ≤0.01%+3mV       Load Regulation     ≤0.01%+3mV       Series Mode     Line Regulation     ≤0.01%+5mV       Load Regulation     ≤0.01%+5mV       Load Regulation     ≤300mV       CH3     Output Voltage     (2.5/3.3/5V) ±8%       Line Regulation     ≤0.01%+3mV       Load Regulation     ≤0.01%+3mV       Kegulation     ≤0.01%+3mV       Namory Save/Recall     Sest       Memory Save/Recall     Sests       Max Output Power     220W  Memory Save/Recall     NSB Device, LAN       Standard Configuration     NSB Device, LAN       Insulation     Sase to Terminal ≥20MQ (DC 500V)       Sase to AC line ≥20MQ (DC 500V)     Sase to AC line ≥20MQ (DC 500V)       Operating Environ     Sudor Usage: Elevation: ≤2000m Environment Temperature 0~40°C Relative Humidity≤80%<		Recovery Time	$<$ 50 $\mu$ s (50% load change, minimum load 0.5A)					
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Series Mode     Line Regulation     ≤0.01%+5mV       Load Regulation     ≤300mV       CH3     Output Voltage     (2.5/3.3/5V) ±8%       Line Regulation     ≤0.01%+3mV       Load Regulation     ≤0.01%+3mV       Load Regulation     ≤0.01%+3mV       Load Regulation     ≤0.01%+3mV       Key     Kipple&Noise     ≤1mVrms (5Hz ~ 1MHz)       Locking Key     Yes       Memory Save/Recall     5 Sets       Max Output Power     220W       Power Source     AC 100V/120V/220V/230V ±10% 50/60Hz       Standard Configurature Interface     USB Device、 LAN       Insulation     Case to Terminal ≥20MΩ (DC 500V) Case to AC line ≥30MΩ (DC 500V) Case to AC line ≥30MΩ (DC 500V) Case to AC line ≥30MΩ (DC 500V)       Operating Environment Temperature 0~40°C Relative Humidity≤80%	Parallel Mode	Line Regulation	≤0.01%+3mV					
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$\begin{tabular}{ c c c } \hline lice and the formula formula for the formula formula for the formula form$	CH3	Output Voltage	(2.5/3.3/5V) ±8%					
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Max Output Power 220W   Power Source AC 100V/120V/230V ±10% 50/60Hz   Standard Configuration Interface USB Device、LAN   Insulation Case to Terminal ≥20MΩ (DC 500V) Case to AC line ≥30MΩ (DC 500V)   Operating Environment Outdoor Usage: Elevation: ≤2000m Environment Temperature 0~40°C Relative Humidity≤80%	Locking Key		Yes					
Power Source   AC 100V/120V/220V/230V ±10% 50/60Hz     Standard Configuration Interface   USB Device、LAN     Insulation   Case to Terminal ≥20MΩ (DC 500V) Case to AC line ≥30MΩ (DC 500V)     Operating Environment   Outdoor Usage: Elevation: ≤2000m Environment Temperature 0~40°C Relative Humidity≤80%	Memory Save/Recall		5 Sets					
Standard Configuration Interface USB Device、LAN   Insulation Case to Terminal ≥20MΩ (DC 500V) Case to AC line ≥30MΩ (DC 500V)   Operating Environment Outdoor Usage: Elevation: ≤2000m Environment Temperature 0~40°C Relative Humidity≤80%	Max Output Power		220W					
Insulation   Case to Terminal ≥20MΩ (DC 500V) Case to AC line ≥30MΩ (DC 500V)     Operating Environment   Outdoor Usage: Elevation: ≤2000m Environment Temperature 0~40°C Relative Humidity≤80%	Power Source		AC 100V/120V/220V/230V ±10% 50/60Hz					
Case to AC line ≥30MΩ (DC 500V) ´     Operating Environment     Outdoor Usage: Elevation: ≤2000m Environment Temperature 0~40°C Relative Humidity≤80%	Standard Configuration Interface		USB Device、LAN					
Elevation: ≤2000m Environment Temperature 0~40°C Relative Humidity≤80%	Insulation							
	Operating Environment		5					
Storage Environment Temperature: -10~70°C Relative Humidity≤70%	Storage Environment		Environment Temperature: -10~70°C Relative Humidity≤70%					
Dimension 225(W)×143(H)×278(D) mm	Dimension		225(W)×143(H)×278(D) mm					
Weight $\approx 8.0 \text{kg}$	Weight		≈ 8.0kg					

### Ordering information

Product description	Product No				
3 channels independent output, min resolution 10mV/10mA, USB Device & LAN, 4.3 inch LCD display	SPD3303X-E				
3 channels independent output, min resolution 1mV/1mA, USB Device & LAN, 4.3 inch LCD display	SPD3303X				
Standard Accessories					
USB Cable -1					
Quick Start -1					
Product Certificate -1					
Calibration Certificate -1					
Power cord -1					
Resources CD(product document and software )-1					
Output Test Cord -2 Sets					

## SPD3000X Series Programmable DC Power Supply



#### About SIGLENT

SIGLENT is an international high-tech company, concentrating on R&D, sales, production and services of test &measurement Instruments.

SIGLENT began to research and develop the Digital Oscilloscope independently in 2002. After a decade of development products have included digital oscilloscopes, isolated handheld oscilloscopes, function/arbitrary waveform generators, digital multimeters, DC power supplies, spectrum analyzers, and other general purpose test instrumentation. Since SIGLENTs first oscilloscope, the ADS 7000 series produced in 2005, SIGLENT has maintained the highest annual growth rate and has been the fastest developing DSO manufacturer over the past 10 years. Nowadays, SIGLENT Technologies is the leading manufacturer of oscilloscopes by shipments in China.

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