

SPD3000X

Series

Programmable DC Power Supply



Data Sheet-2015.7

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 small changes in voltage or current. This is impossible for a low resolution power supply.

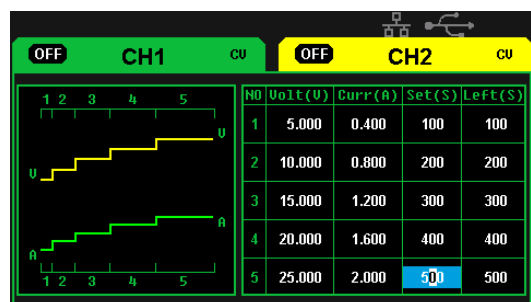
Series/parallel/independent mode function

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.

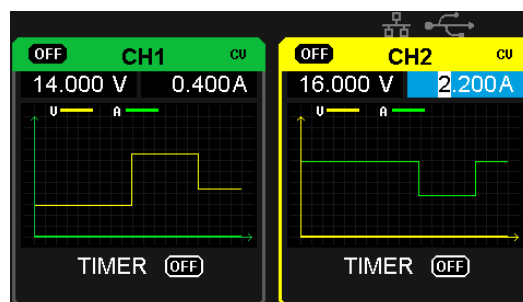


Panel displays the timing output

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.



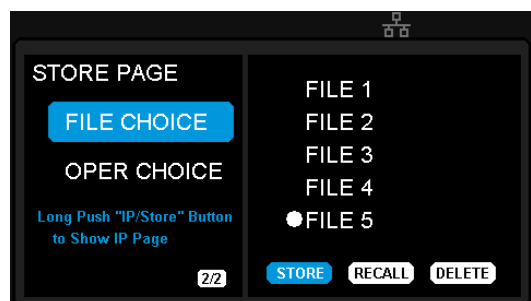
Panel timing output



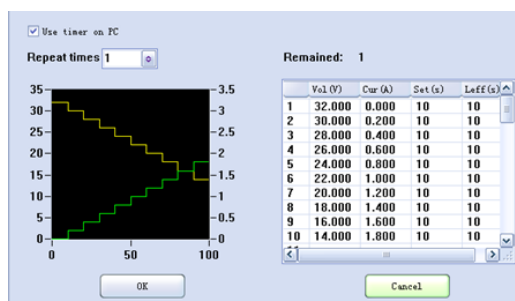
Real time wave display

Save/Recall setting parameters

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

| Model | SPD3303X-E | SPD3303X |
|----------------------------------|---|---|
| Channel | CH1 output voltage: 0 ~ 32V, output current: 0 ~ 3.2A CH2 output voltage: 0 ~ 32V, output current: 0 ~ 3.2A CH3 output voltage: 2.5/3.3/5.0V, output current : 3.2A | |
| Display | 4.3 inch true color TFT-LCD 4 digits voltage 3 digits current | 4.3 inch true color TFT-LCD 5 digits voltage 4 digits current |
| Resolution | 10mV/10mA | 1mV/1mA |
| Program Accuracy | Voltage ± (0.5% of reading+2digits) Current ± (0.5% of reading+2digits) | Voltage± (0.03% of reading+10mV) Current± (0.3% of reading+10mA) |
| Readback Accuracy | Voltage ± (0.5% of reading+2digits) Current ± (0.5% of reading+2digits) | Voltage± (0.03% of reading+10mV) Current± (0.3% of reading+10mA) |
| Constant Voltage Mode | Line Regulation | ≤0.01%+3mV |
| | Load Regulation | ≤0.01%+3mV |
| | Ripple&Noise | ≤1mVrms (5Hz ~ 1MHz) |
| | Recovery Time | < 50μs (50% load change, minimum load 0.5A) |
| Constant Current Mode | Line Regulation | ≤0.2%+3mA |
| | 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 | ≤300mV |
| CH3 | Output Voltage | (2.5/3.3/5V) ±8% |
| | Line Regulation | ≤0.01%+3mV |
| | Load Regulation | ≤0.01%+3mV |
| | Ripple&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 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℃ Relative Humidity≤80% Installation Level: II Pollution Level: 2 | |
| Storage Environment | Environment Temperature: -10~70℃ Relative Humidity≤70% | |
| Dimension | 225(W)×143(H)×278(D) mm | |
| 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 |