GW INSTEK
Simply Reliable

SPS-A Series

單通道交換式直流電源供應器

CE Control I/O





歐規端子



背面

SPS-A 系列為新一代交換式直流電源器，基於原有 SPS 系列全面升級，提供五款機型：SPS-1230A, 1820A, 2415A, 3610A, 606A。全系列採用 Encoder Switch 數位旋鈕與 2.4 吋 TFT LCD 彩色螢幕，帶來更直覺的操作體驗與更高的控制精度。

為提升量測準確度，SPS-A 系列具備 Remote Sensing 與 2W/4W 量測切換，可有效補償線路壓降，確保負載端電壓更精準。內建 OVP、OCP、OTP 等多重保護機制，能在異常狀況下即時反應，保障設備與待測物安全。

在操作便利性方面，產品提供三組參數儲存與呼叫、開機預設設定、面板鎖定等功能，並具備 10 mV / 10 mA 設定解析度與 1 mV / 1 mA 回讀解析度，適合精密測試需求。SPS-A 系列亦支援 GRA-449-J/E 機架安裝配件，並提供輸出 On/Off 控制鍵，提升整體使用效率與操作安全性。

特　　點

* 採用數位旋鈕，可精準調整數值
* Remote Sensing 功能，提供 2 W / 4 W 切換功能
* 提供 OVP, OCP, OTP 保護
* 三組參數設定保存 / 呼叫，一組開機狀態設定
* 設定解析度：10 mV / 10 mA；回讀解析度：1 mV / 1 mA
* 輸出 On / Off 控制
* 面板鎖定功能 (Lock) 防止誤動作
* Control IO 功能
* 支援機架 GRA-449-J/E
* 採用 2.4 吋 TFT LCD 螢幕顯示

Model	V / I	Total Power
SPS-1230A	12 V / 30 A	360 W
SPS-1820A	18 V / 20 A	
SPS-2415A	24 V / 15 A	
SPS-3610A	36 V / 10 A	
SPS-606A	60 V / 6 A	

應 用 範 圍

* 科學研究與實驗測試
* 電池充放電測試
* 電子零件量測
* 3C 電子產品量測

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規　格

		SPS-1230A	SPS-1820A	SPS-2415A	SPS-3610A	SPS-606A
OUTPUT RATING						
Total Channel		1				
Voltage / Current Range		0 V to 12 V / 0 A to 30 A	0 V to 18 V / 0 A to 20 A	0 V to 24 V / 0 A to 15 A	0 V to 36 V / 0 A to 10 A	0 V to 60 V / 0 A to 6 A
Total Power		360 W				
CONSTANT VOLTAGE OPERATION						
Line Regulation *1		≤ 5 mV				
Load Regulation *2		≤ 5 mV				
Ripple & Noise (5 Hz to 1 MHz) *3		≤ 5 mVrms				
Maximum Remote Sensing Compensation Voltage		0.5 V				
Rising Time *4		< 150 ms				
Falling Time *5		< 150 ms (> 10 % rating load)				
Recovery Time *6		≤ 500 μs (50 % to 100% load change)				
Setting Range		0 V to 12.50 V	0 V to 18.50 V	0 V to 24.50 V	0 V to 36.50 V	0 V to 60.50 V
Temperature Coefficient		≤ 100 ppm/°C				
CONSTANT CURRENT OPERATION						
Line Regulation *1		≤ 3 mA				
Load Regulation *7		≤ 10 mA				
Ripple & Noise		≤ 30 mArms	≤ 10 mArms	≤ 10 mArms	≤ 5 mArms	≤ 3 mArms
Setting Range		0 A to 30.10 A	0 A to 20.10 A	0 A to 15.10 A	0 A to 10.10 A	0 A to 6.10 A
RESOLUTION						
Voltage	Setting	10 mV(≦ 36 V) ; 20 mV(> 36 V)				
	Readback	10 mV				
Current	Setting	10 mA				
	Readback	2 mA	2 mA	1 mA	1 mA	1 mA
METER						
Full Scale	Setting	12.50 V / 30.10 A	18.50 V / 20.10 A	24.50 V / 15.10 A	36.50 V / 10.10 A	60.50 V / 6.10 A
	Readback	12.50 V / 30.100 A	18.50 V / 20.100 A	24.50 V / 15.100 A	36.50 V / 10.100 A	60.50 V / 6.100 A
Programming Resolution	Voltage/Current	4 digits / 4 digits				
Readback Resolution	Voltage/Current	4 digits / 5 digits				
Setting Accuracy	Voltage	± (0.1 % of reading + 30 mV) (≦ 36V) / ± (0.1 % of reading + 60 mV) (> 36V)				
	Current	± (0.5 % of reading + 30 mA)				
Readback Accuracy	Voltage	± (0.1 % of reading + 30 mV) (≦ 36V) / ± (0.1 % of reading + 60 mV) (> 36V)				
	Current	± (0.5 % of reading + 30 mA)				
PROTECTION						
OVP	Range	5 % to 105 % of rate output voltage				
	Setting Accuracy	± (1 % of setting + 0.5 V)				
	Resolution	0.1 V				
OCP	Range	5 % to 105 % of rate output voltage				
	Setting Accuracy	± (1 % of setting + 0.3 A)				
	Resolution	0.1 A				
Insulation Resistance		Between chassis and terminal : 20 MΩ or above (DC 500V)				
		Between chassis and DC power cord : 30 MΩ or above (DC 500V)				
ADVANCED FUNCTION						
Status Signal Output	Output ON/OFF Status	Turns on when the output is on				
	CV Status	Turns on during CV operation				
	CC Status	Turns on during CC operation				
	ALM Status	Turns on when an alarm has been activated				
	PWR ON Status	Turns on when the power is turned on				
GENERAL SPECIFICATIONS						
Display		2.4-inch TFT LCD				
Interface		Remote I/O				
Operation Environment		Indoor use, Altitude: ≤ 2000 m; Ambient temperature: 0 °C to 40 °C / Relative humidity: ≤ 80 %; Installation category: II / Pollution degree: 2				
Storage Environment		Temperature: -10 °C to 70 °C, Humidity: ≤ 70 %				
Power Input		AC 115 V/230 V ± 15 %, 50 Hz or 60 Hz				
Power Consumption		900 VA				
Dimensions & Weight		107 mm x 124 mm x 363 mm (W x H x D), Approx. 3.6 kg				

Note: *1. At 97 Vac to 133Vac or 195 Vac or 265Vac, constant load.
*2. From No-load to Full-load, constant input voltage. Measured at the front output terminal.
*3. Measurement frequency bandwidth is 5 Hz to 1 MHz.
*4. From 10 % to 90 % of rated output voltage, with rated resistive load.
*5. From 90 % to 10 % of rated output voltage, with rated resistive load.
*6. Time for output voltage to recover within 0.1 % + 10 mV of its rated output for a load change from 50 % to 100 % of its rated output current.
*7. For load voltage change, equal to the unit voltage rating, constant input voltage.

規格若有局部變更，恕不另行通知！SPS-A SeriesCD1DS

訂購資訊

SPS-1230A	360 W Single Channel Switching Mode DC Power Supply (12 V / 30 A)
SPS-1820A	360 W Single Channel Switching Mode DC Power Supply (18 V / 20 A)
SPS-2415A	360 W Single Channel Switching Mode DC Power Supply (24 V / 15 A)
SPS-3610A	360 W Single Channel Switching Mode DC Power Supply (36 V / 10 A)
SPS-606A	360 W Single Channel Switching Mode DC Power Supply (60 V / 6 A)

標準配件

Standard Type Jack Terminal:
Power Cord x 1, Packing List x 1, Test Lead GTL-105A x 1

European Type Jack Terminal:
Power Cord x 1, Packing List x 1, Test Lead GTL-203A x 1, Test Lead GTL-201A x 1

選購配件

GTL-105A	Test Lead, U-type to Alligator Test Lead, Max. Current 3 A, 1000 mm
GTL-201A	Ground Lead, Banana to Banana, European Terminal, 200 mm
GTL-203A	Test Lead, Banana to Alligator, European Terminal, Max. Current 3 A, 1000 mm
GTL-204A	Test Lead, Banana to Alligator, European Terminal, Max. Current 10 A, 1000 mm
GRA-441-J	Rack Mount kit (JIS)
GRA-441-E	Rack Mount kit (EIA)