



## SPS-31 DC Standard Source

SPS-31 is suitable for test, production and inspection in research institution, national measurement institution at all levels, and meter manufacturer.



### Main Function

- ◆ Test analog and digital DC Voltage meter, Current meter and energy meter;
- ◆ Test DC Voltage transducer and Current transducer.

### Main Features

- ◆ Modular design, strong anti-interference ability, SPS-31 can be used for interference test of static electricity, EMC and so on;
- ◆ 8 inch color touch screen, interface friendly, easy to operate;
- ◆ Equipped with RS232, Ethernet, and WiFi interface, SPS-31 can either support stand-alone operation, PC control or handy wireless terminal control;
- ◆ Communicate with tested meter thru RS-232/485;
- ◆ Customize Auto-calibration and inspection system of meters;
- ◆ Self-protection, alarming and displaying overload location for equipment output overload, Voltage short-circuit, Current open-circuit;
- ◆ Automatically detect, diagnose and alarm the failure;
- ◆ Remotely updating online, easily achieve software update;
- ◆ Support local calibration at users' side.

## Technical Specification

DC Voltage output	Range (4 wires)	100mV, 300 mV, 1V, 5 V, 20V
	Range (2 wires)	100V,300V,1000V
	Adjustment Range	(0~120)%RG,1000V: (0~110)%RG
	Adjust resolution	0.01%RG,0.1%RG,1%RG,or 10%RG
	Stability	0.005%/2min
	Ripple amplitude	≤1%
	Output load	30Vand upper ranges: ≥10mA;7.5Vand below ranges: ≥25mA
	Measurement accuracy	0.05%RG
DC Current Output	Range	1mA,3mA, 10m,30mA, 100mA,300mA, 1A,5A, 10A, 15A,25A
	Adjustment Range	(0~120)%RG
	Adjust resolution	0.01%RG,0.1%RG,1%RG,10%RG
	Stability	0.005%/1min
	Ripple amplitude	≤1%RG
	Output load	25A:25VA,other ranges ≥ 2V;200mA and below ranges ≥15V
	Measurement accuracy	0.05%RG
DC energy	DC energy basic error limit	0.05%RD
DC Voltage measurement	Range	75mV, 100mV,300mV,1V,3V, 10V,30V, 100V, 300V,1000V automatically switch ranges
	Stability	0.005%/1min(Class0.05),0.01%/1min(Class0.1)
	Basic error limit	0.02%RG
	Ripple measuring error	± (5%RD + 0.1%),RD refer to ripple measured value
	Resolution	0.001%RG
DC Current measurement	Range	2mA,20mA,200mA 1A,5A, 10A,30A automatically switch ranges
	Stability	≤100ppm/year
	Basic error limit	0.02%RG(2mA~1A),others: 0.1%RG
	Ripple measuring error	± (5%RD + 0.1%),RD refer to ripple measured value
	Resolution	0.001%RG
General parameters	Power supply	90~265VAC/DC
	Frequency	50Hz~60Hz
	Consumption	50VA
	Environment condition	20°C~30°C,relative humidity ≤85%
	Storage environment	-20°C~50°C
	Size	600mm(L)× 440mm(W)× 176mm(H)
	Weight	15kg