

SPS-100 Three-phase AC Power Source (100A)

SPS-100 is suitable for the measurement departments of research institution, power grid corporation and railway, national measurement institution at all levels, and the test, production and inspection of meter manufacturer.



Main Function

- ◆ Used for various tests of analog and digital AC Voltage meter and Current meter, Single/three phase active and reactive power meter, Phase angle meter, Single/three phase power factor meter, frequency meter, and synchronous-meter, Single/three phase active and reactive power meter;
- ◆ Output 2nd ~63rd harmonics;

Main Features

- ◆ Modular design, strong anti-interference ability. SPS-100 can be used for interference test of static electricity, EMC and so on;
- ◆ High stability, low waveform distortion;
- ◆ 8 inch color touch screen, interface friendly, easy to operate;
- ◆ Equipped with RS232, Ethernet, and WiFi interface, SPS-100 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;
- ◆ Remotely updating online, easily achieve software update;
- ◆ Support local calibration at users' side.

Type

- ◆ SPS-100C Three-phase AC Power Source (100A), Class 0.05;
- ◆ SPS-100B Three-phase AC Power Source (100A), Class 0.1.

Technical Specification

AC Voltage Output	Range	100V, 220V, 380V
	Adjustment Range	(0~120)%RG, RG refers to range, similarly hereafter
	Adjust resolution	0.01%RG, 0.1%RG, 1%RG, or 10%RG
	Stability	0.005%/1min(Class0.05), 0.01%/1min(Class0.1)
	Distortion	≤0.1%(Non capacitive load)
	Max output load	25VA/phase (resistance load)
	Measurement accuracy	0.05%RG(Class0.05), 0.1%RG(Class0.1)
AC Current Output	Range	0.05A, 0.2A, 1A, 5A, 20A, 100A
	Adjustment Range	(0~120)%RG, RG refers to range, similarly hereafter
	Adjust resolution	0.01%RG, 0.1%RG, 1%RG, or 10%RG
	Stability	0.01%/2min(Class0.05), 0.02%/2min(Class0.1)
	Distortion	≤0.2%(Non capacitive load)
	Max output load	120VA(120A range)
	Measurement accuracy	0.05%RG(Class0.05), 0.1%RG(Class0.1)
Power output	Power output stability	0.01%/2min(Class0.05), 0.02%/2min(Class0.1)
	Active/reactive power measurement accuracy	0.05%RG(Class0.05), 0.1%RG(Class0.1)
Phase output	Output adjusting range	0° ~360°
	Output adjusting resolution	10°, 1°, 0.1°, or 0.01°
	Resolution	0.01°
	Measurement accuracy	0.05°
Power factor output	Adjusting range	-1~0~+1
	Measuring resolution	0.0001
	Measurement accuracy	0.0005
Frequency output	Adjusting range	40Hz~70Hz
	Output adjusting resolution	1Hz, 0.1Hz, 0.01Hz, or 0.001Hz
	Resolution	0.001Hz
	Accuracy	0.001Hz
Harmonic setting	Harmonic order	2 nd ~63 rd
	Harmonic amplitude	0~40%
	Harmonic angle	0° ~359.99°
	Harmonic set error	2 nd ~31 st : ≤ ± 0.1%, 32 nd ~63 rd : ≤ ± 0.2%
Energy error measurement	Active energy basic error limit	± 0.05%RD(Voltage15V~660V, Current0.02A ~ 60A, PF≥0.5) ± 0.1%RD(Voltage15V~660V, Current0.01A ~ 0.02A, PF=1)
	Reactive energy basic error limit	± 0.1%RD(Voltage15V~660V, Current0.02A ~ 60A, PF≥0.5) ± 0.2%RD(Voltage15V~660V, Current0.01A ~ 0.02A, PF=1)
General parameters	Power supply	90~265VAC/DC
	Frequency	50Hz~60Hz
	Consumption	50VA~1000VA
	Environment condition	20℃~30℃, relative humidity≤85%
	Storage environment	-20℃~50℃
	Size	600mm(L) × 440mm(W) × 266mm(H)
	Weight	35kg