



SPS-50 Three-phase AC Power Source (50A)

SPS-50 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-50 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-50 can either support stand-alone operation, PC control or handy wireless terminal control;
- ◆ Communicate with tested meter thru RS-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-50C Three-phase AC Power Source (50A), Class 0.05;
- ◆ SPS-50B Three-phase AC Power Source (50A), Class 0.1.

Technical Specification

AC Voltage Output	Range	100V, 220V, 380V, 660V
	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, 16.67A, 50A
	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	50VA(50A 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°~63°
	Harmonic amplitude	0~40%
	Harmonic angle	0° ~359.99°
	Harmonic set error	2°~31°: ≤ ± 0.1%, 32°~63°: ≤ ± 0.2%
Energy error measurement	Active energy basic error limit	± 0.05%RD(Voltage 15V~660V, Current 0.02A~60A, PF ≥ 0.5) ± 0.1%RD(Voltage 15V~660V, Current 0.01A~0.02A, PF=1)
	Reactive energy basic error limit	± 0.1%RD(Voltage 15V~660V, Current 0.02A~60A, PF ≥ 0.5) ± 0.2%RD(Voltage 15V~660V, Current 0.01A~0.02A, PF=1)
General parameters:	Power supply	90~265VAC/DC
	Frequency	50Hz~60Hz
	Consumption	50VA~1000VA
	Environment condition	20°C~30°C, relative humidity ≤ 85%
	Storage environment	-20°C~50°C
	Size	600mm(L) × 440mm(W) × 176mm(H)
	Weight	28kg