

SPS-100 3-phase AC Power Source (100A)



SPS-100 AC Power Source

Signal: AC, 3 phase

Accuracy: Class 0.05 or Class 0.1

AC voltage output: 0-792V

AC current output: 0-120A

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: SPS-100 is designed 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; it also outputs 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" 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 RS485;
- ♦ 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 calibration locally at users' side.

Order Info SPS-100 contains 2 models with different accuracy below:
SPS-100C, Accuracy Class: 0.05
SPS-100B, Accuracy 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 (Class 0.05), 0.01%/1min (Class 0.1)
Distortion: ≤0.1% (Non capacitive load)
Max output load: 25V /phase (resistance load)
Measurement accuracy: 0.05%RG (Class 0.05); 0.1%RG (Class 0.1)

AC Current output:

Range: 0.05A, 0.2A, 1A, 5A, 20A, 100A
Adjusting range: (0~120) %RG, RG refers to range, similarly hereafter
Adjusting resolution: 0.01%RG, 0.1%RG, 1%RG, or 10% RG
Stability: 0.01%/2min (Class 0.05), 0.02%/2min (Class 0.1)
Distortion: ≤0.2% (Non capacitive load)
Max output load: 120VA (120A range)
Measurement accuracy: 0.05%RG (Class 0.05); 0.1%RG (Class 0.1)

Technical Specification

Power output

Power output stability: 0.01%/2min (Class 0.05), 0.02%/2min (Class 0.1)
Active/reactive power measurement accuracy: 0.05%RG (Class 0.05); 0.1%RG (Class 0.1)

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: 0.001 Hz

Harmonic setting

Harmonic order: 2nd ~63rd
Harmonic amplitude: 0~40%
Harmonic angle: 0°~359.99°
Harmonic set error: 2nd~31st: ≤±0.1%, 32nd~63rd: ≤±0.2%

Energy error measurement:

Active energy basic error limit:
±0.05%RD (Voltage 15V~660V, Current 0.02A~120A, 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~120A, PF≥0.5)
±0.2%RD (Voltage 15V~660V, Current 0.01A~0.02A, PF=1)

Other parameters:

Power supply: 90-265VAC/DC
Power frequency: 50Hz~60Hz
Power consumption: 50VA~1000VA
Environment condition: 20°C~30°C, Humidity: RH≤85%
Storage environment: -20°C~50°C
Size: 600mm (L) × 440mm (W) × 176mm (H)
Weight: 35kg