

## GF303

### Program-controlled Three-phase Standard Power Source

*GF303 Program-controlled Three-phase Standard Power Source is suitable for power department, measuring department, quality control department, research units, institutions of higher learning, electric energy meter, power distribution terminals, power supply management, load control, power quality, reactive power compensation device and the production of enterprise etc.*



## Features

1. To set up and take the load regulation of voltage, current, phase angle, frequency and power factor, also can be used as AC current source, AC voltage source or power source
2. To set 2-128 times of the amplitude and phase harmonics, and it can be added to the base wave in every harmonic output
3. Frequency value is adjustable (AB and phase C)
4. Voltage, current output a wide range, big power, high stability, waveform distortion degree is small
5. Strong with load ability, but it can take capacitive, sensibility, resistance of composite type load or load and load regulation is higher than 0.01%
6. To apply the 32 bit MPU + DSP + FPGA, powerful flexible
7. To use hardware PID, fast response, the change of load will not cause output volatility
8. Industrial frequency waves as high as 50000 points a week of the wave kneading, signal output without filter, precise output waveform, the harmonic output precision, harmonic distortion degree is small
9. Range switching automatically
10. To use software calibration, simple operation, stable and reliable
11. To have big screen, 320 x 240 LCD display, Chinese or English interface, operating simply
12. To have perfect over-current, over-voltage, heat, a shorts-and-opens, overload protection, failure detection automatically.
13. With RS232 interface, and PC connection
14. To take place machine software, it can be output through the PC software program

## Parameters

Electrical parameters	
Accuracy class	0.05%, 0.1%
Power supply	Single phase AC 85V-265V, 50/60 Hz
AC Voltage output	
Range (U1, U2,U3 phase)	57.7V / 100V / 220V / 380V, switch automatically (max 420V)
Adjustment resolution	0.01%, 0.1%, 1%, 10%,

**Electrical parameters - continued**
**AC Voltage output - continued**

Accuracy	0.05% RG
Stability	0.005% RG/1min
Distortion degree	better than 0.1% (not capacitive load)
Load Capacity	25VA
Full load regulation rate	Less than 0.01% RG
Full load regulation time	Less than 1mS
Temperature drift	8 PPM / °C
Long-term stability	60 PPM/year

**AC Current output**

Range (I1, I2, I3 phase)	0.1/0.25A/0.5A/1A/5A/10A/20A, switch automatically
Adjustment resolution	0.01%, 0.1%, 1%, 10%,
Accuracy	0.05% RG
Stability	0.005% RG/1min
Distortion degree	better than 0.1% (not capacitive load)
Load capacity	25VA
Full load regulation rate	Less than 0.01% RG
Full load regulation time	Less than 1mS
Temperature drift	8 PPM/°C
Long-term stability	60 PPM/year

**Power output**

Active power accuracy	0.05%
Reactive power accuracy	0.1%
Stability	0.005% RG/1min

**Phase**

Range	0°-359.99°
Adjustment resolution	0.01°, 0.1°, 1°, 10°
Accuracy	0.03°

**Power factor**

Adjusting range	-1 to 0 to +1
Resolution	0.0001
Accuracy	0.0005

**Frequency**

Range	40-65Hz or 40-400Hz (option)
Adjustment resolution	0.001Hz, 0.01Hz, 0.1Hz, 1Hz
Accuracy	0.002Hz
Temperature drift	0.5PPM/°C
Long-term stability	4 PPM/year

**Electrical parameters - continued**
**Harmonic**

Harmonic times	2-128
Adjustment resolution	0.1% (compared with fundamental wave)

**Harmonic content (compared with fundamental wave)**

Voltage	≤40%
Current	≤40%
Phase	0°-360°

**Capacitive load capacity**

0 - 280 V	1uF
280 - 420 V	0.6uF

**Mechanical parameters**

Dimensions (W×D×H) (mm)	450x380x160
Weight (kg)	18

**Environmental conditions**

Working temperature	0°C to 40°C
Storage conditions	-30°C to 60°C
Relative humidity	≤85%

## Selection guide

No.	Accuracy	Voltage range	Current range	Weight	Remark
3030601	0.10%	0-264V	0-6A	12KG	
3030605	0.05%	0-264V	0-6A	12KG	
3031201	0.10%	0-420V	0-12A	13.5KG	
3031205	0.05%	0-420V	0-12A	13.5KG	
3032001	0.10%	0-420V	0-20A	18KG	
3032005	0.05%	0-420V	0-20A	18KG	
303H0601	0.10%	0-300V	0-6A	15KG	XP system
303H0605	0.05%	0-300V	0-6A	15KG	XP system
303H1201	0.10%	0-420V	0-12A	18KG	XP system
303H1205	0.05%	0-420V	0-12A	18KG	XP system
303H2001	0.10%	0-420V	0-20A	20KG	XP system
303H2005	0.05%	0-420V	0-20A	20KG	XP system