

## GF3031

Three Phase Portable Power Source for voltage up to 500 V and current up to 120 A

*The GF3031 is a powerful and portable three phase current and voltage source. All test values are generated absolutely synthetically with a high degree of accuracy and stability. The source is available in 12 A, 24A or 120 A.*

*The GF3031 three phase portable power source is a lightweight and portable current and voltage source based on newest technology and serves for solving this problem by simulating the required load conditions. Operation is performed by integrated 7" touch screen or via keyboards.*



### Functions

1. Individual load point settings
2. Programmable phase shift control from 0-360°
3. Programmable wave form generation for voltage and current
4. Generation of up to the 51th harmonic in voltage and current
5. Programmable power factors
6. Programmable frequency 40-70Hz
7. Configuration of balanced and unbalanced load points
8. Color display with graphical interface
9. Indication of load values, vector diagram and waveform
10. Current, voltage and phase shift are adjustable to high accuracy individual per phase
11. User friendly menu guided operation
12. Operation without need of an external PC

### Features

1. Accuracy class 0.05 or 0.1
2. Three phase current generation up to 120 A (AC)
3. Three phase voltage generation up to 500 V
4. All test values are generated synthetically
5. 7 inch TFT touch LCD
6. With USB or RS232
7. Weight light 15Kg
8. Overload, short circuit, open circuit protection

## Parameters

Electrical parameters	
Accuracy class	0.05%, 0.1%
Power supply	Single phase AC 100-265 V, frequency 50/60 Hz
AC Voltage output	
Range (U1, U2, U3 phase)	57.7V, 100V, 220V, 380V(Max 500V); range switch
Adjust fineness	0.01% RG
Accuracy	0.05% RG
Stability	<0.01% RG/120s
Distortion degree	<0.3% (not capacitive load)
Output power	30VA
Full load regulation rate	0.01% RG
Full load regulation time	Less than 1mS
Long-term stability	± 60 PPM/year
AC Current output	
Range (I1, I2, I3 phase)	0.2A, 1A, 5A, 20A, 100A(Max 120A); range switch
Adjustment range	(0-120)%RG
Adjust fineness	0.01% RG
Accuracy	0.05% RG
Stability	<0.01% RG/120s
Distortion degree	<0.3% (not capacitive load)
Output power	20VA(20A), 50VA(100A)
Full load regulation rate	0.01% RG
Full load regulation time	Less than 1mS
Long-term stability	± 60 PPM/year
Power output	
Accuracy	0.05% RG
Stability	0.01% RG/120s
Phase angle	
Adjusting range	0°-359.99°
Resolution	0.001°
Accuracy	0.03°
Power factor	
Adjusting range	-1 ~ 0 ~ +1
Resolution	0.0001
Accuracy	0.0005

**Electrical parameters-continued**
**Frequency**

Adjusting range	40-70 Hz
Resolution	0.001 Hz
Accuracy	0.005 Hz
Temperature drift	± 0.5 PPM/°C
Long-term stability	± 4 PPM/year

**Voltage /Current/Harmonic Setting**

Harmonic number	2-51times
Harmonic content	0-40%
Harmonic phase	0-359.99
Harmonic setting accuracy	(10%±0.1%)RD <sup>(2)</sup>

**Mechanical parameters**

Dimensions (W×D×H) (mm)	495x390x195
Weight (kg)	15

**Environmental conditions**

Working temperature	0°C to 50°C
Storage condition	-30°C to -60°C
Relative humidity	≤ 85%

## Selection guide

NO.	Accuracy	Voltage range	Current Range	Weight
30311201	0.10%	0-500V	0-12A	15KG
303112005	0.05%	0-500V	0-12A	15KG
30312401	0.10%	0-500V	0-24A	16KG
303124005	0.05%	0-500V	0-24A	16KG
303112001	0.10%	0-500V	0-120A	22KG
3031120005	0.05%	0-500V	0-120A	22KG