

## GF302C

### Portable Panel Meter Calibrator

*It is suitable for power plant and substation work area of grid companies, test division and the instrument, and national levels measuring and testing institutions, such as railway, petroleum, chemical industry and other large industrial and mining enterprises, scientific research units, etc.*



## Introduction

This device is according to nation verification regulation JJG124-2005 "ammeter, voltmeter, power meter and resistance meter calibration regulations and the relevant countries standard requirements and design three-phase 0.05 magnitude meter source integration calibration device". The core technology of this device is with digital signal processor (DSP) and 16 high-speed digital converter, which is composed of high precision work frequency communication terminal; The signal source use the DSP and 16 high-speed digital-to-analog converters, which can control the sine wave, distortion wave signal source; Equipment has high precision, stable and reliable, and easy to operate flexible, and other characteristics; Electric power system is used for electrical measurement is the ideal calibration equipment.

## Features

1. It can check all kinds of electric measurement of instrument including: AC/DC voltmeter, AC/DC ammeter, frequency meter, phase angle meter, single/three-phase AC active power meter, single/three-phase AC reactive power meter, synchronous meter, etc.;
2. Built-in electric measurement of verification procedure indicating meter, automatic or semi-automatic for verification, saving 1000 groups data;
3. It can as a voltage source, a current source and power source for high precision and high stability standard resource;
4. 6.4 inch big screen color display;
5. It is calibrated in the software and don't need to open the case, stable and reliable;
6. Having short circuit, current output terminal, output voltage open protection and power amplifier overheating protection function;
7. Having automatically failure detection function, shows fault part, it is convenience for users to check line;
8. With USB port and PC connection for data management.

## Parameters

Electrical parameters	
Accuracy class	0.05%, 0.1%
Power supply	Single phase AC 220V±10% or 110V±10%, 50/60 Hz
Communication Port	USB port
<b>AC voltage output</b>	
Range(U1,U2,U3)	50 V, 100 V, 200 V, 400 V, 600 V
Adjusting range	(0-120) % RG
Adjust fineness	0.005% RG
Accuracy	0.05% RG
Stability	0.01%/1min
Load capacity	25 VA
Output distortion degree	≤0.3% (linear load)
<b>AC current output</b>	
Range(I1,I2,I3)	0.5A, 1A, 2.5A, 5A, 10A, 20A
Adjusting range	(0-120) % RG
Adjust fineness	0.005% RG
Accuracy	0.05% RG
Stability	0.01%/1min
Load capacity	25 VA
Output distortion degree	≤0.3% (linear load)
<b>DC voltage output</b>	
Range	75 V, 150 V, 300 V, 500 V, 1000 V
Adjusting range	(0-120) % RG
Adjust fineness	0.005% RG
Accuracy	0.05% RG
Stability	0.01%/1min
Load capacity	25 VA
<b>DC current output</b>	
Range	0.5A, 1A, 2.5A, 5A, 10A, 20A
Adjusting range	(0-120)% RG
Adjust fineness	0.005% RG
Accuracy	0.05% RG
Stability	0.01%/1min
Load capacity	25 VA
<b>AC power output</b>	
Accuracy	0.05% RG
Stability	0.01%/1min

<b>Electrical parameters - continued</b>	
<b>Frequency</b>	
Frequency range	45-65 Hz
Resolution	0.001 Hz
Accuracy	0.002 Hz
<b>Power factor output</b>	
Adjusting range	-1 to 0 to +1
Adjust fineness	0.0001
Accuracy	0.0005
<b>Phase angle</b>	
Scope	0°-359.99°
Resolution	0.01°
Accuracy	0.05°
<b>Voltage/Current harmonic output</b>	
Times	2 <sup>nd</sup> -31 <sup>th</sup>
Content	0-40%
Phase	0°-359.999°
Configuration error	(10% RD + 0.1%), RD refers to the configuration value of harmonic contents
<b>Mechanical parameters</b>	
Dimensions (W×D×H) (mm)	460x430x185
Weight (kg)	18
<b>Environmental conditions</b>	
Working temperature	0°C to 40°C
Storage conditions	-30°C to 60°C
Relative humidity	≤85%