

## GF333V2

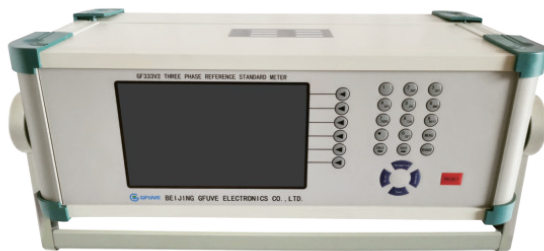
### THREE PHASE MULTIFUNCTION REFERENCE STANDARD METER

GF333V2 three phase reference energy meter is a reference standard with the characteristics of wide-range, multifunction and high-precision. It has accuracy class of 0.01 or 0.02. By adopting techniques of DSP, embedded system and automatic temperature balancing and other compensation, it has not only advantages of light weight, small size, high precision, high performance, powerful function, original interface, ease-to-use, but also work stability. It has been designed for universal laboratory and test applications and is intended for checking and the calibration of reference standards for electrical power and energy. In addition, it can be integrated into meter or reference standard test systems of higher accuracy.

This model GF333V2 reference standard can be widely used in fields of electric energy measuring, electric energy laboratories and other relevant industry, not only in laboratories but also at the industrial field.

### Application

1. Power plant;
2. AMI design center;
3. Energy meter R & D;
4. Electrical laboratory;
5. Watt-hour meter factory;
6. Metrological service center;
7. Laboratories of power utilities;
8. Electricity meter manufacturers;
9. Meter test bench integrated factory;
10. National metrology and testing department;
11. Electricity power bureau & power company;
12. Electrical department of industrial and mining enterprises;



### Features

1. IEC60736 standard;
2. ISO17025 lab standard;
3. Vector diagram function;
4. Suit for testing in the lab;
5. With clamp on ct optional;
6. With PC software optional;
7. Waveform display function;
8. Wide range 0-600V/0-240A;
9. High stability, high reliability;
10. Energy accumulating function;
11. Metal structure, strong and reliable;
12. Measuring 2nd~63rd harmonics;
13. Pulse constant can be programmable;
14. As a three phase reference standard;
15. High resolution 7 inch touch TFT LCD;
16. High accuracy class up to 0.01% or 0.02%

## Parameters

Electrical parameters	
Accuracy class	0.01% or 0.02%
Power supply	220V±10% , 50/60Hz
Power consumption	30VA
Voltage measurement	
Range	0-600.000V
Error	±0.005% (30V-600V) ±0.05% (5V-40V)
Harmonic	2nd-64th
Current measurement	
Range (direct connection)	1mA-120.000A; 1mA-240.000A
Error (direct connection)	±0.005% (10mA-120A) or (10mA-240A); ±0.02% (1mA-10mA)
Harmonic	2 <sup>nd</sup> -64 <sup>th</sup>
Range (Clamp on ct) optional	10mA-120.000A; 10mA-1000.00A; 1A-3000.00A optional
Error (Clamp on ct)	±0.1% (10mA-120A) or (10mA-1000A);
Power measurement error	
Active power	±0.01% (0.01A-120A) or (0.01A-240A) ±0.02% (0.001A-0.01A)
Reactive power	±0.05% (1mA-120A) or (1mA-240A)
Energy measurement error	
Active energy	±0.01%(10mA-120A) or (10mA-240A) ±0.05% (0.001A-0.01A)
Reactive energy	±0.05% (1mA-240A)
Phase angle	
Range	0°-360.000°
Resolution	0.001°
Error	±0.005°
Power factor	
Range	-1.00000-0-1.00000
Resolution	0.00005
Error	0.00001
Frequency	
Range	40.0000-70.0000Hz
Resolution	0.00001
Error	±0.0002

**Electrical parameters - continued**
**Pulse output**

Output channel	3
Energy constant	1-9999999
Pulse ratio	1:1
Output level	5V
Output rated frequency	60KHz, max 86.4KHz

**Pulse input**

Input channel	3
Input level	3-12V
Min. pulse width	200ns
Min. pulse interval	200ns
Input frequency	Max. 2.1MHz

**Function**

LCD Display	7" inch 800x480 pixel touch TFT
Vector diagram	Yes
Waveform	Yes
Energy accumulation	Yes
Self-calibration	Yes
Data storage	Yes
PC software	Optional
Communication port	RS232, USB

**Standard**

Standard	IEC 62053-21,22, 23; IEC 60736; ANSI C12.20-2002; JJG 597-2005; JJG596-2012; JJG 1085-2013; JJF 68-2019; DL/T 826-2002; DL/T 1478-2015; DL/T 448-2016
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**Safety**

Isolation protection	IEC 61010-1:2001
Measurement Category	300 V CAT III, 600 V CAT II
Degree of protection	IP40
Declaration of conformity	CE & CNAS certified

**Mechanical parameters**

Dimensions (W×H×D) (mm)	445×220×152
Weight (kg)	≤7.2

**Environmental conditions**

Ambient temperature	0°C to 40°C
Storage temperature	-20°C to 65°C
Relative humidity	10%-85%
Temperature coefficient	≤0.0002% /°C
Influence of external fields	0.05 %/mT