GF112B

Single-Phase kWh Meter Calibrator

GF112B Single Phase kWh Meter Calibrator is suitable to test various types single phase kWh meters error on site - including single phase electronic meter, single phase mechanical energy meter. and also it can be used to test alternating current parameters - U, I, P, Q, S ,F, E etc.

The GF112B single phase working standard is distinguished by its exemplary combination of functionality and design. It is offering optimal ergonomics and functionality combined with an excellent menu guided operation via built-in touch-keys and a 2.8 inch TFT color touch LCD-display. Weight lightest, dimension small, measurement stability. It is one of the best single phase electricity test unit on site for testing single phase energy meter accuracy with 1P2W.

Features and Functions

1. Easy and user friendly operation;
2. 4-quadrant energy measurement;
3. Testing of energy and power registers;
4. Micro-multifunction smart optical sampler;
5. Unique long-term and temperature stability;
6. Displayed by colorful and 2.8 inch touch TFT LCD;
7. One screen displays all the measured parameters;
8. The AAA Li-battery can work 20 hours continuously;
9. Oscilloscope function display current & current wave;
10. Automatically record and save 1000 groups calibrate data;
11. 16 bit high accuracy AD switch 32 bit ARM processor core;
12. The current clamp and reference meter Integration design;
13. Manually/automatically test inductive single phase kWh meters;
14. Manually/automatically test electric single phase kWh meters;
15. Testing of electricity meter error installations with single-phase 2-wire;
16. Testing parameters: active power, phase angle of voltage/current and frequency etc;
17. With wide voltage measuring range 0 -300V and current measuring range 0.001-120A;
18. The current clamp has automatic compensation and calibration function with accuracy class 0.2%;

Application

1. Power plant;
2. Metrological service center;
3. Distribution power corporation;
4. Power engineering service company;
5. Electricity power bureau & power company;
6. National metrology and testing department;
7. Electrical department of property company;
8. Electricity meter quality supervision department;
9. Electrical department of industrial and mining enterprises;

Parameters

Electrical parameters	
Accuracy class	0.2%
Active power measurement accuracy	0.2%, 0.5%
Energy measurement accuracy	0.2%, 0.5%
Power supply	AAA type, Li rechargeable battery, 1800mAh, 3.6V it can work 20 hours continuously
Warming-up time	<5 min
Voltage measurement	
U Range	0-300V
Accuracy	0.2%
Current measurement	
I Range	1mA-120A
Accuracy	0.2%
Phase measurement	
Range	0.00°-359.99°
Resolution	0.01°
Accuracy	0.05°
Frequency measurement	
Range	45-65Hz
Resolution	0. 001Hz
Accuracy	0.005Hz
Power Factor Measurement	
Range	-1 ~0 ~1
Resolution	0.001
Accuracy	0.002
Energy pulse output	
Pulse constant	25000
Energy Pulse Input	
Input range of pulse constant	1-25000
Pulse input level	5V

Electrical parameters - continued	
Function	
Register test	Yes
Voltage and Current Wave	Yes
Optical sampler	Yes
Pulse cable	Yes
PC management software	Yes
LCD	2.8 inch touch TFT color LCD
Data storage	1000 sets
Communication port	USB
Standard	
Standard	IEC 62053-21,22, 23; IEC 60736; IR46; 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
Safety	
Isolation protection	IEC 61010-1:2001
Measurement Category	300 V CAT III
Degree of protection	IP42
Declaration of conformity	CE & CNAS certified
Mechanical parameters	
Dimensions (W×D×H) (mm)	215×60×30 Aperture of current clamp: 20mm
Weight (kg)	0.25 (mains) 1.5 (accessory and portable box)
Environmental conditions	
Working temperature	-10°C to 55°C
Working humidity	5%-85%RHD
Storage temperature	-25°C to 70°C
Storage humidity	5%-95%RHD

Accessory