

GF334

Small Size Handheld Harmonics Power Analyzer

GF334 harmonics power analyzer is small size, handheld design, with current measurement directly from 0 to 20A, accuracy 0.05%, harmonics measurement from 2nd to 64th, display harmonic content and bar graph. As a high precision power analyzer. It is suitable for electricity power utilities and power plant, technical supervision department, industrial, mining, petroleum as well as chemical, home appliances and manufacturing enterprises. Application for power measurement, lab power reference standard, harmonic analysis, load analyzer etc.

Features

1. Ultra-compact design, handheld, small size, light weight.
2. The measured data can record, query and upload print.
3. It can measure harmonics ration from 2nd to 64th and the harmonic analysis.
4. Showing the AC waveform, vector diagram and determining the 3P3W connection errors.
5. Instrument calibration by using software to facilitate the correction instrument variation.
6. It can be divided into direct current clamp measurements and precision measurements.
7. High accuracy instrument, good stability and wide range of voltage monitoring 0-600V, current 1mA - 20A.
8. It can measure three phase voltage, current, active power, reactive power, power factor, frequency, phase, etc.
9. The usage of multi-channel power supply, AC power supply can also be rechargeable battery-powered machine.



Functions

1. Measuring energy consumption values: the precise timing measurements of electrical equipment for short-term energy consumption; energy resolution; milli-watts; time resolution; milli-second; they are difficult to available for common instrument of power. The functions are used by pumping, cranes, air conditioning and other equipment in a work cycle connected power consumption.
2. The value of the measurement process: it can be recorded and tested continuously of voltage, current, active power, reactive power and other electrical parameter values and curves in a dynamic process and graphically display.
3. To measure the instantaneous values - including the exchange parameters: U, I, P, Q, PF, phase angle, frequency, harmonics, etc.

4. Measuring harmonics: measure/display voltage and current waveforms and harmonic bar graph.
5. Calibrator meter: load calibration of various single phase and three phase energy meters.
6. Vector analysis: based on the voltage, current and phase error, display vector graphics.

Parameters

Items	Range	Effective resolution	Accuracy1	Accuracy2	Remarks
Voltage	0-600V	0.001V	0.1%	0.05%	2 ranges
Current	0-20A	0.001A	0.1%	0.05%	3 ranges
Clamp-on	0.01-100A	0.01A	0.15%	0.15%	Option(2)
Frequency	45-65Hz	0.001Hz	0.005Hz	0.001Hz	5 bit display
Active power	0 to $\pm U_{max} \times I_{max}$	0.01W	0.5%	0.2%	5 bit display
Reactive power	0 to $\pm U_{max} \times I_{max}$	0.01Var	1%	0.5%	5 bit display
Apparent power	0 to $\pm U_{max} \times I_{max}$	0.01VA	1%	0.5%	5 bit display
Active energy			0.5%	0.2%	
Reactive energy			1%	0.5%	
Harmonic	2nd-64th		0.5%	0.2%	
Power factor	0 to ± 0.9999	0.0001	± 0.001	± 0.0005	5 bit display
Phase	0-359.999°	0.005°	$\pm 0.05^\circ$	$\pm 0.02^\circ$	6 bit display

(1) Directly test

(2) Clamp-on 500A,3000A,5000A is optional.

Electrical parameters

Power supply	One-phase power supply (85-265VAC/45-70Hz) Lithium battery, 5000mAh
Communication port	RS232
Energy constant	3600imp/kWh, 360000imp/kWhx4
Frequency Influence	≤ 20 ppm/Hz
Pulse Interface	TTL energyx6

Mechanical parameters

Main machine (LxWxH) (mm)	240x157x60
Weight (kg)	1.5
Carrier dimension (LxWxH) (mm)	470x380x220
Carrier weight (kg)	10.6 (Including three clamp-on (100A), wires and software)

Environmental conditions

Environment	-10 to +55°C, 15-85%RHD
Altitude (m)	-10 to 3500
Temperature	-20°C to 65°C
Temperature	≤ 25 ppm/°C (U/I), ≤ 50 ppm/°C (others)