

GF312B2

Portable Three Phase Reference Meter With Clamp on ct

GF312B2 portable three phase reference meter high accuracy 0.02%, with all kinds of optional clamp on ct and smart optical sampler. It can be applied in electrical laboratory or on site. it will be ensured by a combination of measures such as the use of 24bit A/D converter, DSP+32 bit ARM technology, a widely measuring range 600V/120A, adapted to typical test points of most recognized national metrological institutes. It can be as high precision three phase reference energy meter, also three phase portable meter calibrator, test ct pt ratio, burden etc.

Application

1. Power plant;
2. Energy meter R & D;
3. Electrical laboratory;
4. Watt-hour meter factory;
5. Metrological service center;
6. Electricity power bureau & power company;
7. National Metrology and testing department;
8. Electrical Department of industrial and mining enterprises;



Features

1. Vector diagram function;
2. Data download by U disk;
3. With PC control software;
4. 4.3 inch TFT touch color LCD;
5. High accuracy up to 0.02%;
6. Waveform display function;
7. DSP+32 bit ARM technology;
8. Energy accumulating function;
9. Metal body, strong and reliable;
10. Measurement 2~63 times harmonics;
11. Suit for testing in the field or in the lab;
12. Verification of comprehensive metering device;

Parameters

Electrical parameters

Accuracy class	0.02% , 0.05%
Power supply	40-450V, 50/60Hz±2Hz
Power consumption	13VA

Electrical parameters - continued

Communication port	RS232, USB
Voltage measurement	
Range	0.04-600V
Resolution	0.001V
Error	$\pm 0.02\%$ (30V-600V) $\pm 0.05\%$ (0.1V-30V)
Harmonic	2 nd -63 st
Current measurement	
Range (direct connection)	1mA-120A
Resolution	0.1mA
Error (direct connection)	$\pm 0.02\%$ (10mA-120A) $\pm 0.05\%$ (0.1mA-10mA)
Harmonic	2 nd -63 st
Clamp on CT(option)	5A, 20A, 100A, 200A, 500A, 1000A, 2000A, 3000A
Accuracy	0.20%
Power measure error	
Active power (direct connection)	$\pm 0.02\%$ (0.1A-120A) $\pm 0.05\%$ (0.02A-0.1A)
Reactive power (direct connection)	$\pm 0.05\%$ (0.1A-120A)
Energy measure error	
Active energy (direct connection)	$\pm 0.02\%$ (0.01A-120A) $\pm 0.05\%$ (0.001A-0.01A)
Reactive energy (direct connection)	$\pm 0.05\%$ (0.01A-120A)
Phase angle	
Range	0°-360°
Resolution	0.005°
Error	$\pm 0.015^\circ$
Frequency	
Range	40-70Hz
Resolution	0.0005Hz
Error	0.001Hz
Power factor	
Range	-1.0 ~ 0 ~ +1.0
Resolution	0.0001
Error	0.0005

Electrical parameters - continued
Reference Meter

Measuring modes	2WA / 2WR / 2WAP
	3WA / 3WR / 3WAP / 3WRCA / 3WRCB
	4WA / 4WAb / 4WR / 4WRb / 4WAP / 4WAPb / 4WRC
Bandwidth	3000Hz
Sampling	16 bit 504 samplers/period

Pulse output

Energy constant	1-250000
Pulse ratio	1:1
Output level	5V

Pulse input

Input channel	2
Input level	5-24V
Input frequency	Max. 2MHz

Display

Color LCD	7"STN (800×480), touch
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Function

Vector diagram	Yes
Waveform	Yes
Energy accumulation	Yes
CT ratio test	Yes
CT PT programmable	Yes
Local parameter input	Yes
Wiring emulation	Yes
Self-calibration	Yes
Recorder check	Yes
Data storage	Yes
GPS	Yes
Data storage qty	10000
External extend memory	Yes
Screen printing	Yes
Communication port	USB/RS232
Communication with PC	Yes
Upload data	Yes
External mini printer	Yes
Keyboard	Yes

Electrical parameters - continued
Safety

IP class according to DIN EN 60529	IP65
Declaration of conformity	CE & CNAS conform
Protection class according to DIN EN 61140	II
Overvoltage category voltage measurement	CAT III 600V
Overvoltage category current	CAT III 600V

Mechanical parameters

Dimensions (W×H×D) (mm)	365×269×151
Weight (kg)	4

Environmental conditions

Ambient temperature	-25°C to +50°C
Storage temperature	-30°C to +65°C
Relative humidity	15%-95%