

GF211B

MULTI-FUNCTION DOUBLE CLAMP DIGITAL PHASE ANGLE METER

GF211B multi-function double clamp digital phase angle meter is a multi-functional portable instrument. It can measure not only alternating voltage, but also alternating current. Its important function is to measure phase angle between two voltages, between two current or between voltage and current. The current signal is obtained by the clamp current transformer without cutting off current wire. It can discern inductive circuit and capacitive circuit; directly read differential protection phase among every unit of CT; check connection of transformer; measure three way voltage phase sequence; check whether the meter connection is right or not; evaluate the running speed of electric kWh meter. It has high resolution of current, so can be used as a leakage current meter. It is an ideal choice for electric power bureau, factories, mine, petroleum-chemistry enterprises, metallurgy factories and so on.

Features

1. Operational simple;
2. Handheld designed;
3. As a power meter on site;
4. Measure two channel voltage phase sequence;
5. Discern inductive circuit and capacitive circuit;
6. Check connection of transformer automatically;
7. Evaluating the running speed of electric kWh meter;
8. Checking whether the meter connection is right or not;
9. High resolution of current, used as a leakage current meter;
10. Directly read differential protection phase among every unit of CT;
11. Current signal is obtained by the clamp current transformer on line directly;
12. Measure phase angle between two channel U, between two channel I or between U & I;
13. Measure alternating voltage (U), alternating current (I), frequency (F), active power (P), reactive power (Q), power factor (PF) etc;



Application

1. Power plant;
2. Electrical industrial field;
3. Power transformer factory;
4. Metrological service center;
5. Protection relay commission in substation;
6. Electricity power bureau & power company;
7. Power engineering commissioning company;
8. Electrical Department of industrial and mining enterprises;

Parameters

Electrical parameters	
Accuracy class	0.5%
Power supply	3.7V Li-batteries
Scale	
Phase	0-360.0°
AC Voltage	0-500V; two channel
AC Current	200mA / 2A / 10A; two channel
Frequency	45-65Hz
Active power accuracy	0.5%, resolution 0.01W
Power factor	-1 ~ 0 ~ 1, resolution 0.001
Vector	Yes
LCD	2.8 inch greenlight LCD
Fundamental error (under standard operating environment)	
Temperature	23°C±5°C
Moisture	<65%
Wave form	Sine wave Distortion ≤0.5%
Frequency	50±2Hz, 60±2Hz
Wire position	Center of clamp
Phase measurement	Voltage: 100V±25V Current: 1A±0.2A
Phase accuracy	0.5% FS
Voltage accuracy	
200V	0.2FS, Resolution 0.1V
500V	0.2FS, Resolution 1V
Current accuracy	
10A	0.5FS, Resolution 10mA
2A	0.5FS, Resolution 1mA
200mA	0.5FS, Resolution 0.1mA
Input impedance	
When measure voltage	1MΩ
Input voltage impedance	>120KΩ when measure phase
Phase measurement	
Voltage range	0-500V
Current range	0.001-10A

Electrical parameters

Additional error

Measure phase angle, the voltage and the current	Less than the fundamental error
Measure current	The error led by wires away from center of clamps is less than the fundamental error

Safety specification

Resistance to voltage	The meter can resist 1000V (AC sine wave, 50Hz or 60 Hz) for 1 minute between the meter circuit and the meter case; Between input joint U1 and U2 can resist 500V (AC sine wave, 50Hz or 60 Hz) for 1 minute.
Insulation resistance	The resistance both between the meter circuit and the meter surface and between the terminals U1 and U2 is greater than 100MΩ.

Mechanical parameters

Dimensions (W×D×H) (mm)	185×85×41
Weight (kg)	0.26

Environmental conditions

Operating temperature	-10°C to +50°C
Storage temperature	-20°C to +70°C
Humidity	Relative humidity ≤95% not condensing

Accessory

Multi-function double clamp digital phase angle meter	1 piece
Clamps 10A	2 pieces
Clamp wire	2 pieces
Voltage wire	2 pieces
User's manual	1 piece
Certification of quality(test report)	1 piece
Box	1 piece

Accessories

