

GF211D

INTELLIGENT DIGITAL PHASE ANGLE METER

GF211D 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. Handheld designed;
2. Operational simple;
3. As a power meter on site;
4. Recorder 500 sets of test data;
5. Large screen high backlight color display;
6. Discern inductive circuit and capacitive circuit;
7. Check connection of transformer automatically;
8. Measure two channel voltage phase sequence;
9. Checking whether the meter connection is right or not;
10. High resolution of current, used as a leakage current meter;
11. Directly read differential protection phase among every unit of CT;
12. Current signal is obtained by the clamp current transformer on line directly;
13. Measure phase angle between two channel U, between two channel I or between U & I;
14. 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. Power engineering commissioning company;
7. Electricity power bureau & power company;
8. Electrical Department of industrial and mining enterprises;

Parameters

Electrical parameters	
Accuracy class	0.5%
Power supply	9V Li-batteries
Scale	
Phase	0-360.0°
AC Voltage	0-600V; two channel U1 U2
AC Current	200mA / 2A / 20A; two channel I1 I2
Frequency	45-65Hz
Active power accuracy	0.5%, resolution 0.01W
Power factor	-1 ~ 0 ~ 1, resolution 0.001
Vector	Yes
LCD	3.5 inch color 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	0.5FS, Resolution 0.1V
600V	0.5FS, Resolution 1V
Current accuracy	
20A	0.5FS, Resolution 10mA
2A	0.5FS, Resolution 1mA
200mA	0.5FS, Resolution 0.1mA
Input impedance	
When measure voltage	2MΩ
Input voltage impedance	>120KΩ when measure phase
Phase measurement	
Voltage range	0-600V
Current range	0.001-20A
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

Electrical parameters - continued
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 600V (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.
Standards	IEC61010-1 CAT III 600V, IEC61010-031, IEC61326, Pollution level 2

Mechanical parameters

Dimensions (W×D×H) (mm)	187×191×51
Weight (kg)	0.45

Environmental conditions

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

Accessory

GF211D Digital phase angle meter	1 piece
20A Clamp on ct	2 pieces
Alligator clip	2 pieces
Voltage cable(1.5m)	2 pieces
User's manual	1 piece
Test Certificate	1 piece
Portable Box	1 piece