

ZC-610A Clamp Phase Meter

ZC-610A digital dual clamp phase volt ampere meter is designed for the field measurement of voltage, current and phase and the design of a high precision, low price, portable handheld, dual channel input measurement equipment. The table can be easily between the field measurement U-U, I-I and U-I phase discrimination of inductance and capacitance circuit and three-phase voltage phase sequence, detecting the transformer connection group, test secondary circuit and the mother difference protection system, read the phase relationship between the differential protection CT in these two groups, check meter wiring correct and not used.



Product Features

- ◆ ingenious structure, easy to operate.
 - (A)hand held structure
 - (B)you should not disconnect the circuit or change the measurement range under 10mA-10A, 3V-500V.
 - (C)use high contrast LCD, character can be 25mm, the screen angle can be 700, to obtain the best visual effects.
 - (D)the function and layout of the switch are reasonable, rotating can read the measuring voltage ,current and phase.
- ◆ high resolution
adopt new type patent current clamp , current resolution up to 0.1mA; voltage resolution up to 0.1V.
- ◆ Low power consumption
this product with micro power consumption design and with the function of testing the voltage of battery.

Technical Parameter

Display number	3 ^{1/2}	Shell size	140×40×19
Sampling rate	3 times per second	Jaw size	Φ7×8
Power supply	A single 9V stack battery, the power supply current is less than 5mA	Weight	Body: 280g; Measuring pliers: 2×200g
Case size	186×86×33mm	Storage condition	Temperature: -10℃~50℃

ZC-610B Handheld Three-phase Meter

ZC-610B handheld three-phase meter is designed with high speed M3 Cortex processor and 24 bit high speed ADC for measurement and calculation of electric parameters, fully graphical interface, true color display resolution of 320×240, touch screen man-machine interface is friendly, the instrument is easy to carry.



Product Features

- ◆ Simultaneous measurements of three phase voltage and four current (including zero line current).
- ◆ At the same time measuring phase, three-phase AC voltage and current phase angle, angle.
- ◆ Measurement of power frequency and phase sequence.
- ◆ Automatic identification of transformer winding, capacitive and inductive loads.
- ◆ Six angle chart display, color sequence analysis.
- ◆ Active power, reactive power, apparent power, three-phase power and power factor measurement.
- ◆ Data save and view..
- ◆ Data static save function, can save 50 groups of data.
- ◆ 3.2 inch TFT color display with touch function.
- ◆ Lithium battery powered, rechargeable continuous standby for more than 20 hours.

Technical Parameter

Type	Measuring range	Unit	Error	Resolution ratio
Voltage	1~600	V	0.5%×Range	0.01V
Electric current	0.001~20	A	0.5%×Range	0.0001A
Active power	0.001~5000	W	0.5%×reading (PF=1)	0.1W
Reactive power	0.001~5000	VAR	0.5%×reading (PF=0)	0.1VAR
Apparent power	0.001~5000	VA	0.5%×reading	0.1VA
Frequency	45~65	Hz	0.1%×reading	0.01Hz
Phase	0~360		2°	0.1°

ZC-620A Clamp Watt-hour Meter On-site Calibrator

The instrument is used for testing the on-the-spot accuracy all kinds of single phase electric energy meter, and can also be used in the measurement of power frequency alternating current parameter.

Product Features

- ◆ Pliers type current transformer and precision electrical energy design standard combined with touch type color liquid crystal display, simple appearance and smooth operation.
- ◆ Intelligent power management, high efficiency and energy saving. Lithium battery power supply, the working hours of the most up to 24 hours.
- ◆ Voltage and current measurement range, voltage: 5~220V, current: 0.01~50A.
- ◆ Measurement parameters of a screen display, easy to operate.
- ◆ Instrument internal automatic compensation measurement error, measurement accuracy up to 0.1.
- ◆ Clamp table design, easy to carry, the ability to resist interference.



Technical Parameter

Measuring range	Voltage	10~240V (r.m.s)	Measurement accuracy	Voltage accuracy	0.1%
	Current	50mA~60A (r.m.s)		Current accuracy	0.1% (2.5~50A), 0.2% (0.05~2.5A)
	Phase angle	0~359.99°		Phase error	≤0.1° M
	Frequency	45~65Hz		Frequency error	≤0.005 HzM

ZC-620B Multi-functional electric energy meter field calibrator

Product Features

- ◆ The instrument is a high precision measuring instrument, which can be used in the power quality problems such as the electric energy meter calibration, the electric parameter test and the detection of the power quality problems such as wave distortion, voltage fluctuation and flicker, three-phase unbalance and so on.
- ◆ Without power failure, without changing the metering circuit; without opening the metering device, on-line test the integrated error of the real load testing and metering equipment.
- ◆ The precise measurement of voltage, current, active power, no power, phase angle, power factor, frequency, etc. many electric parameters to calculate the measurement error of the test equipment circuit.
- ◆ Can display the measured voltage and current vector diagram, the user can get the correct connection of the measurement equipment through the analysis of vector diagram. At the same time, in the three-phase three wires connection mode, can automatically determine the 48 connection mode.
- ◆ The current circuit can be measured using clip on transformer; operating personnel without interrupting current loop can be convenient and safe measure.
- ◆ Can check voltage meter, current meter, power meter, phase meter and other indicators as well as three-phase three wire, three-phase four wire, single phase 1A, 5A all kinds of active and reactive power meter.
- ◆ Can use photoelectric, manual, pulse and other methods of electric energy meter calibration.
- ◆ Measurement and analysis of the power quality of the power supply from the utility grid, the measurement and analysis of the frequency deviation, voltage deviation, voltage fluctuation, flicker, three phase voltage and power grid harmonics.



Technical Parameter

Input characteristics	Voltage measurement range	50V, 0~400V, 100V, 200V, 400V four automatic switching range.
	Current measurement range	0~5A, built-in transformer is divided into 5A (CT) file. A transformer is 5A (Q), 25A (Q), 100A (Q), 500 (Q)
	Phasor measurement range	0~359.9°