

# ETCR<sup>®</sup> EM4000A Intelligent Double Clamp Digital Phase Voltammeter



## Product Function

When the tested circuit is not open, simultaneously measure the 2 channel of AC voltages, currents, phases between voltages, phases between currents, phases between voltages and currents, frequency, phase sequence, active power, reactive power, apparent power, and power factor, identify the transformer wiring group, inductive and capacitive circuits, and test the secondary circuit and bus differential protection system, read the phase relationship between each group CT of differential protection, check whether the wiring of the watt-hour meter is correct, and repair the line equipment etc.

## Product Features

1. Intelligent design, reduce the complexity of operation, reduce the possibility of misoperation, with high precision, high stability, low power consumption, easy to use and other advantages.
2. Adopt with voltage transformer and clamp current sensor to input, without high voltage inside the meter, complete isolation between 2 input channels, safe and reliable.
3. Small sharp clamp type is suitable for flat cable dense site.
4. The test wire is special electric power cable, all the spring plug and alligator clip have insulated protection. The meter equip with insulated non-slip sheath.
5. Equip with USB interface, Data storage up to 1200 groups, upload the storage data to computer via the system software , convenient to read, save, report, print historical data, etc.

## Technical Specification

Test Accuracy (Under reference conditions)	Voltage range: AC 0.00V~600V	Resolution: AC 0.01V	Error: $\pm(0.5\% \text{ range})$
	Current range: AC 0.0mA~20.0A	Resolution: AC 0.1mA	Error: $\pm(0.5\% \text{ range})$
	Phase range: 0.0°~360.0°	Resolution: 0.1°	Error: $\pm 1^\circ$
	Frequency range: 45.00Hz~65.00Hz	Resolution: 0.01Hz	Error: $\pm(1.0\% \text{ range})$
	Active power range: 0.0W~12kW	Resolution: 0.1W	Error: $\pm(1.0\% \text{ range})$
	Reactive power range: 0.0var~12kvar	Resolution: 0.1var	Error: $\pm(1.0\% \text{ range})$
	Apparent power range: 0.0VA~12kVA	Resolution: 0.1VA	Error: $\pm(1.0\% \text{ range})$
	Power factor range: -1.000~+1.000	Resolution: 0.001	Error: $\pm 0.03$
Power Supply	DC9V Alkaline dry cell battery LR6 1.5V X6PCS		
Detection Rate	About 2s/times		
CT Size	$\Phi 8\text{mm}$		
Meter Dimension	196mmX92mmX54mm		
Instrument Weight	About 2.23kg(include accessories)		
Display Mode	2.8-inch TFT colorful LCD screen, display area: 58mmX44mm		
Data Storage	1200 groups		
Data Hold	During testing, press <b>HOLD</b> key to hold the data, "HD" symbol display		
Communication Interface	USB interface, storage data upload to computer, convenient to analyze management data		
Automatic Shutdown	Automatic shutdown after starting up 15 minutes without any operation		
Voltage Detection	When the battery voltage is lower than 7.2V, low battery symbol will display, remind to replace battery		
Input Impedance	Test voltage input impedance: 1M $\Omega$		
Working Current	Max power consumption of open backlight: 135mA; Power consumption of close backlight: 90mA		
Accessories	Host meter: 1PCS; Clamp current sensor: 2PCS; Test line: 4PCS; USB data cable: 1PCS; Meter case: 1PCS; LR6 battery: 6PCS		