

# ES050HV High Voltage Clamp Current Sensor



## I. Product Introduction

FR050HV high voltage clamp current sensor is a portable clamp design using the latest CT technology. It is designed to measure the current, leakage current, high harmonic current, phase, electric energy, power, power factor of high and low voltage lines, etc. It is not necessary to disconnect the circuit under test. It is safe, fast, high-precision, and highly stable without interruption. The sensor adopts an automatic opening and closing structure. The front pushing jaw opens and clamps the measured wire, and the back pulling jaw opens to leave the measured wire, used with the insulating rod and for high voltage line test of 60KV and below.

FR050HV can measure with a variety of measuring instruments, and can also be connected to phase detection analyzers, industrial control devices, data loggers, oscilloscopes, harmonic analyzers, power quality analyzers, high-precision digital multimeters, and more. It is easy to use and easy to carry. Widely used in substations, power plants, industrial and mining enterprises and testing stations, electrical maintenance departments for current detection and field electrical work. Insulation rods have characteristics of moisture resistance, high temperature resistance, impact resistance, bending resistance, high insulation, etc.

## II. Technical Specification

<b>Features</b>	CT clamp structure
<b>Function</b>	current, leakage current, transformation ratio, higher harmonic current, phase, electric power, power, power factor of the High and low voltage lines
<b>output Method</b>	Current sensing output
<b>Jaw Size</b>	Φ50mm
<b>Secondary Development Display Window</b>	46*30mm
<b>Range</b>	AC 0.0mA~1200A
<b>Resolution</b>	AC 0.1mA
<b>Accuracy</b>	$\pm 1.0\%FS(50Hz/60Hz; 23\text{ }^{\circ}C \pm 2\text{ }^{\circ}C)$ The wire is in the center of the jaw
<b>Phase Error</b>	$\leq 3^{\circ}$ (50Hz/60Hz; $23\text{ }^{\circ}C \pm 2^{\circ}C$ )
<b>Turn Ratio</b>	4000: 1 (can be customized)
<b>Reference Load</b>	RL: $0\sim 10A \leq 50\ \Omega$ ; $0\sim 100A \leq 5\ \Omega$ ; $0\sim 1200A \leq 0.5\ \Omega$
<b>Weight</b>	300g
<b>Dimensions</b>	L/T/H 87mmX 37mmx 262mm
<b>Output Interface</b>	10cm long, can be connected by opening the upper and lower covers
<b>Electric field Interference</b>	about 10mA when the external electric field 100A approaches 30mm

<b>Wire position</b>	The tested wire is at the center of the jaw
<b>Current Frequency</b>	45Hz~65Hz (measured current frequency)
<b>Line Voltage</b>	AC60kV and below, circuit test telescopic insulation poles should be fully opened
<b>Working Temperature</b>	-25°C~55 °C
<b>Medium Strength</b>	AC3700V/rms (between iron core and shell)



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