1. Safety Warnings

This instrument has been designed, manufactured and tested according to IEC 61010 Safety requirements for Measuring apparatus intended for Measuring apparatus in an electrical installation or apparatus intended for use as a measuring instrument, and has been examined and approved for the conditions for which it is designed. However, erroneous results may be obtained and serious injury may occur if the instructions are not followed. Please carefully read the instructions before using the instrument.

**WARNING**

Read through and understand the instructions contained in this manual before using the instrument.

Keep the manual at hand to be able to refer to it whenever necessary.

The instrument is to be used only in its intended applications. Having read the safety instructions contained in the manual.

It is essential that the above instructions are adhered to. Failure to follow the instructions may mean the protection provided for the instrument, and may cause injury, instrument damage and/or accident under test.

The symbol # indicated in the instrument means that the user should refer to the explanation in the instruction manual.

**DANGER**

Don’t attempt to measure in a circuit in the following categories:
- Do not attempt to measure in the presence of dangerous gases. Otherwise, the use of the instrument may cause sparking, which can lead to an explosion.
- Always ensure the instrument to be clear from fault and test under normal conditions.

Never attempt to make measurements in the high voltage electric field or strong magnetic fields due to large currents exist in the test object and testing circuit.

The instrument must not be used on any conductors and under test, and that the instrument is powered off when opening the battery compartment cover for battery replacement.

Never exceed the maximum allowable input of any measuring ranges.

Do not attempt to make measurement in the presence of any of the buttons. If the display is still blank, the batteries are exhausted. Replace the batteries with the new ones.

2. Features

- Flexible and light weight Sensor with air core coil
- While measuring ranges up to 3000V (2000V / 5000A)
- Auto-power-off function
- MIN MAX function
- Auto-power-on function
- Temperature coefficient: Add 0.1 x specified accuracy/ ºC
- Crest factor (CF): Full scale CF < 1.6, half scale CF < 3.2.

3. Specification

**Range** | Display range | Accuracy
---|---|---
DCV: 1000 V | 0 - 3149 V | ±0.3%
DCV: 2000 V | 0 - 3149 V | ±0.3%
DCV: 5000 V | 0 - 3149 V | ±0.3%
ACV: 750 V | 0 - 3149 V | ±0.3%
ACV: 2000 V | 0 - 3149 V | ±0.3%
ACV: 5000 V | 0 - 3149 V | ±0.3%

**Dimensions**

- Radius 75 mm (ø150) ±3.0%
- Radius 50 mm (ø100) ±2.0%
- Radius 25 mm (ø50) ±1.0%

**Weight**

Approx. 300g (including batteries)

**Cable length**

Approx. 1.8m (between clamp sensor and main unit)

**Applicable standards**

IEC61010-1, IEC61010-2-030
CAT III 1000V / CAT IV 600V Pollution degree 2

**Power source**

Size AAA battery x 2 pcs

**Temperature coefficients**

Add 0.1 x specified accuracy/ ºC

**Battery**

2 x Size AAA battery

**Overload Protection**

AC 5000A for 10 sec.

**Weight**

Approx. 300g (including batteries)

**Dimensions**

- Cable length: Approx. 1.8m (between clamp sensor and main unit)
- Accessory: Battery compartment cover and tightener: 1 pc
- Battery: Size AAA battery x 2 pcs

4. Instrument layout

- Oscilloscope
- Connector
- Battery compartment cover
- Screw
- Battery compartment cover

5. Getting started

- Check the battery
- Check the battery compartment

6. Operating instructions

- Never make measurement on a circuit in the following categories:
- CAT IV over 600V
- CAT IV over 1000V
- CAT IV over 1000V
- Never open the Battery compartment cover while making measurement.
- To avoid getting electrical shock by touching the equipment under test or its surroundings, be sure to wear insulated protective gloves.
- Ensure that the Clamp sensor is disconnected from the object under test, and that the instrument is powered off when opening the Battery compartment cover for battery replacement.

7. Other functions

- 7-1 Auto-power-off function

This function is to power on the instrument by being exhausted by the instrument being unintentionally left on. The instrument automatically shifts to the power-off state about 15 min after the last Function switch or other switch operation. To cancel the Auto-power-off function, press any button or set the Function switch to OFF position once, and then set it to the desired range.

**Note**

- The instrument may not be used in its intended application.

- The instrument may not be used if the distance from the center position.

8. Battery Replacement

- Do not mix new and old batteries or mix different types of batteries.
- Replace batteries with the new ones when the empty battery mark is displayed on the LCD. The empty battery mark is displayed even when the empty battery mark, when the batteries are completely exhausted.

**DANGER**

- Do not mix new and old batteries or mix different types of batteries.
- Never attempt to replace the batteries with the new ones.