


# True RMS Flexible AC Current Clamp meter User Manual



**Please read this manual before switching the unit on.  
Important safety information inside.**



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## 1-Introduction

Congratulations on your purchase of the True RMS Flexible AC Current Clamp meter.

### The True RMS AC/DC Current Clamp meter features:

- Auto Power OFF
- Data Hold
- Inrush
- Frequency
- Data logger
- Backlit LCD display
- Bluetooth wireless transmit

## 2-Safety

### 2-1.International Safety Symbols



This symbol, adjacent to another symbol or terminal, indicates the user must refer to the manual for further information.



This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present



Double insulation

### 2-2.Safety Notes

- Do not exceed the maximum allowable input range of any function.
- Do not use when instrument power is off.
- Remove the battery if meter is to be stored for longer than 60 days.

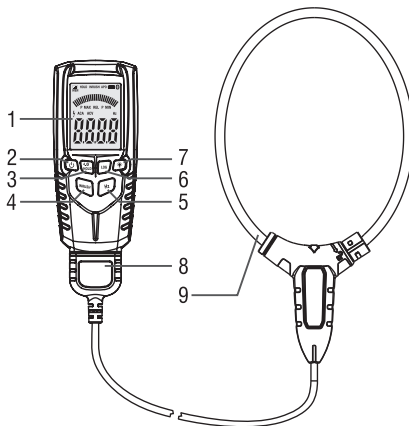
### 2-3.Cautions

- Improper use of this meter can cause damage, shock, injury or death. Read and understand this user manual before operating the meter.
- Inspect the condition of the test coil and the meter itself for any damage before operating the meter. Repair or replace any damage before use.
- Use great care when making measurements if the voltages are greater than 25VAC RMS or 35VDC. These voltages are considered a shock hazard.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

### 3-Description

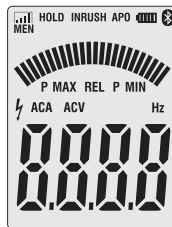
#### Meter Description

- 1-LCD display
- 2-Power button
- 3-Data Hold/BT wireless transmit button
- 4-Inrush button
- 5-Hz button
- 6-Data storage button
- 7-Backlight button
- 8-Current coil plug
- 9-Flexible current coil



### 4-Display icons Description

<b>HOLD</b>	Data Hold
<b>0 to 3000</b>	Measurement display digits
<b>AC A</b>	Alternating Current
	Low battery
<b>Hz</b>	Hertz (Frequency)
<b>INRUSH</b>	Inrush current
	Memory storage
	Bluetooth wireless transmit
	Auto power off



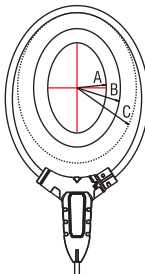
## 5-Specifications

Function	Range	Resolution	Accuracy (% of reading + digits)
AC Current 50~400Hz	30.00A AC	0.01A	$\pm(3.0\% + 8d)$
	300.0A AC	0.1A	$\pm(3.0\% + 5d)$
True RMS	3000A AC	1A	$\pm(3.0\% + 5d)$

**Note:** Accuracy is given as  $\pm$  (% of reading + counts of least significant digit) at  $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$ , with relative humidity less than 80%RH.


### Position Error of clamp:

Accuracy and position error assumes centralized primary conductor at optimum position, no external electrical or magnetic field, and within operating temperature range.



	Flexible coil radius(mm)		Error
Distance from Optimum(mm)	A	35	1.0%
	B	50	1.5%
	C	60	2.0%

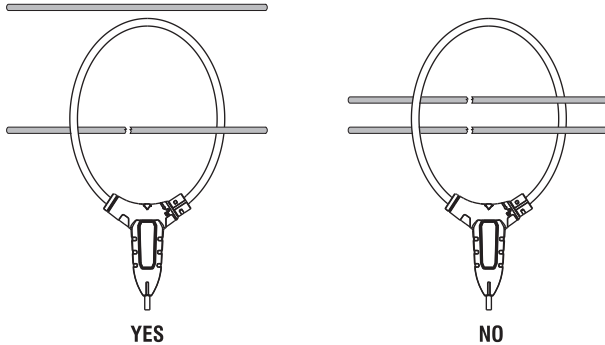
## 6-General Specifications

<b>Display</b>	3000 counts backlit LCD
<b>Low Battery indication</b>	"  " is displayed
<b>Over-range indication</b>	" OL " display
<b>Operating Temperature</b>	5°C to 40°C(41°F to 104°F)
<b>Storage Temperature</b>	-20°C to 60°C(-4°F to 140°F)
<b>Operating Humidity</b>	Max 80% up to 31°C (87°F)decreasing linearly to 50% at 40°C(104°F)
<b>Storage Humidity</b>	<80%
<b>Operating Altitude</b>	7000ft. (2000meters)maximum.
<b>Battery</b>	1.5V "AAA" Size Battery x 2
<b>Auto power OFF</b>	After approx. 15 minutes
<b>Safety Standard</b>	EN61010-1, EN61010-2-032, EN61326-1. Overvoltage Category III 1000V and Category IV 600V, Pollution Degree 2.

## 7-Operation

### 7-1.AC Current Measurements

First, the flexible coil interface position, twist to the lock position. The coil wire to measure the single ring, and flexible coil torsion interface position to the closed position. Press the power button to boot, and the current value will be displayed on the LCD screen.



### 7-2.Power button

Short press the power button to boot, long press the power button to shut down.

### 7-3.Frequency button

In the process of measuring the AC current, the Hz key will enter the frequency measurement mode, and the frequency value will be displayed on the LCD screen.

### 7-4.Data Hold/ Button

In the alternating current AC current measurement and frequency measurement process, press the HOLD button, the data will remain on the LCD screen, easy to see. Long press this button, will enter the Bluetooth transfer mode.



### 7-5.LCD Backlight Button


The LCD is equipped with backlighting for easier viewing, especially in dimly lit areas. Press the backlight button to turn the backlight on. Press again to turn the backlight off. Note that the meter does have an auto power off feature as described below.

### 7-6.INRUSH Button

Inrush current measurement function in the manual measurement mode, the need for professionals to predict the value of the inrush current, and then select the appropriate measuring range, to ensure the accuracy of the measurement.

- Short press "INRUSH" key to enter "INRUSH" measurement mode, LCD screen display "----", at this time the instrument is preset in the 3000A range.
- After entering the INRUSH measurement mode, long press "INRUSH" key, can conversion to 30.00A measurement range; long again, according to the "INRUSH" bond, conversion to 300.0A measurement range; long again, according to the "INRUSH" key, conversion to 3000A measurement range.
- The preset range, starting with electrical equipment, inrush current value will remain on the LCD screen. If you want to measure again, you need to re-enter the measurement model.
- Enter the "INRUSH" mode, and then short press "INRUSH" key, you can exit the measurement model.

### 7-7.LOG Button

Press LOG key, The instrument will display  , And begin to record the current changes in the known period of time data, and stored in the instrument for the Mobile APP to read and analyze data.

Long press  key into the Bluetooth communication mode, the instrument display  , the instrument will be sent to the Mobile APP in real time. If the Bluetooth and long press LOG key, the instrument display "SEND", you can send the data stored in the data to the Mobile APP, send the complete automatic return to the measurement mode.

### 7-8.Automatic Power OFF

In order to save power, the instrument without any key operation, automatic shutdown after about 15 minutes. After the shutdown to press the power button once again open the instrument.

## **8-Maintenance**

### **8-1.Cleaning and Storage**

Periodically wipe the case with a damp cloth and mild detergent; do not use abrasives or solvents. If the meter is not to be used for 60 days or more, remove the battery and store it separately.

### **8-2.Battery Replacement**

- Remove the Phillips head screw that secures the rear battery door.
- Open the battery compartment.
- Replace two AAA batteries.
- Secure the battery compartment.



*Rev. 170930*

