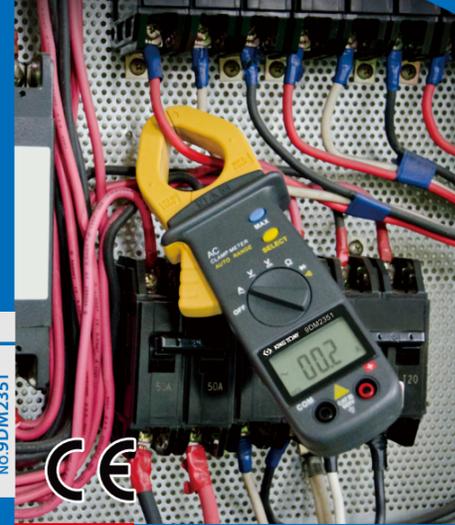


DIGITAL CLAMP METER



**SAFETY PRECAUTIONS:**  
Before use, read the following safety precautions.

**PRECAUTION:**  
To avoid danger and damage happened during operation, the following symbols are used as points for attention.

- WARNING**  
• Improper use of the meter may bring hurt or even death to body.
- Please read the operation carefully.
- : Dual insulation
- : AC - (Alternating current)voltage/current
- : DC - (Direct current) voltage
- : Grounding - earth terminal

**WARNING**  
■ To prevent electrical shock or fire!

- Before measurement, make sure that the test leads and function switch has been set properly.
- Before switching among functions, remove the test leads off the measured object.
- Before measurement, make sure the circuit current of object won't exceed the maximum measurement range.
- Do not use his meter if any crack or damage occurred in the case or test leads.
- Do not open the case of meter or the battery lib during measurement.
- Please keep your hands behind the guard ring of test leads while measuring with test leads.
- Please keep your hands below the guard ring of the meter while measuring with sensing jaw.
- Before proceeding resistance measurement, turn off the power to the circuit under test first.
- Never use the meter in rainy or humid environment or with wet hands.
- Before proceeding current measurement, make sure to remove the test leads from the input terminals.

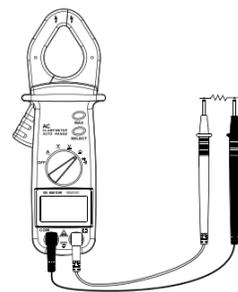
**WARNING**  
■ To prevent damage to the meter or electrical shock!  
According to the safety standard, the maximum voltage input power is classified as follows to protect the users against transient impulse voltage in power lines.

Over-voltage category (CAT.)	Maximum input voltage
CAT III	600V

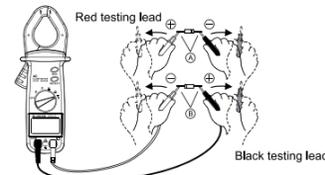
- Do not use the meter near equipment emitting noise or under an environment with sudden temperature change; otherwise, unstable or erroneous reading will appear.
- Take the batteries out of the meter if it will be left idle for a long time.
- After measurement, switch the function knob back to OFF position. As there will be slight power consumption under auto power off mode.
- Please position the conductor in the center of jaw in order to ensure the accuracy of measurement while measuring current.
- Please make sure to keep out of high current to ensure the accuracy of measurement while measuring current.
- Do not use organic solvent to clean the meter but with a soft cloth if necessary.
- Do not expose the meter under direct sunshine or extreme temperature or in moisture places.
- When the measurement values appear irregularly or the symbol displays, replace the batteries immediately to ensure normal operation.

■ Resistance measurement(Ω)  
Measuring range:200Ω-20MΩ (6ranges, auto-ranging)  
1.Set the function switch knob on Ω  
2.Plug the black test lead into COM terminal and the red one into terminal  
3.Connect the test leads to the circuit under test and then read the value when it stabilizes  
4.The meter will choose the appropriate range to measure automatically  
5.When measurement finished, set the function switch knob on OFF position to turn off the meter.

:Before undergoing resistance measurement, firstly switch off the power to the circuit under test and fully discharge the capacitor



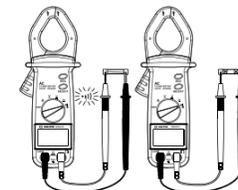
■ Diode Check ( )  
1.Set the function switch knob on /  
2. Symbol will appear on the LCD  
3.Connect the test leads to the diode an d then read the value when it stabilizes  
(A)Forward-bias diode test  
Connect black test lead to the cathode and red one to the anode  
Silicon diode value reading approximate 0.5~0.7V  
Germanium diode value reading approximate 0.5~0.7V  
Note that reading close to 0V represents a short-circuit and "OL" symbol indicates an open-circuit.



(B)Reverse-bias diode test  
Connect black test lead to the anode and red one to the cathode. Normally, it shows OL on display, indicating that the diode under test is normal. The diode is defective if the display gives a certain voltage level.

4.When measurement finished, set the function switch knob on OFF position to turn off the meter.

■ Continuity measurement ( )  
1.Set the function switch knob on /  
2.Press select key until symbol appears on LCD  
3.Plug the black test lead into COM terminal and the red one into terminal  
4.Connect the test leads to the circuit under test. If circuit is continuous or less than 60Ω (±20Ω), the beeper will sound  
5.When measurement finished, set the function switch knob on OFF position to turn off the meter.



(3) Auto power off (power - saving) device

- When power on the meter and you don't touch any key or function switch knob for 15minutes, the meter will turn the power off automatically.
- One minute before the meter shut down, the alarm sounds to warn the users.
- Once the meter turns the power off already, you can press the MAX key to regenerate the meter again.

(4) Replacing batteries

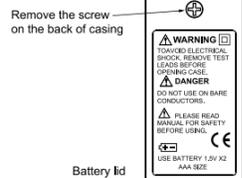
If symbols appears, the batteries fall below the normal operation voltage. Replace them with 2 new batteries. (Standard UM-4 or R03 AAA batteries)

**WARNING**

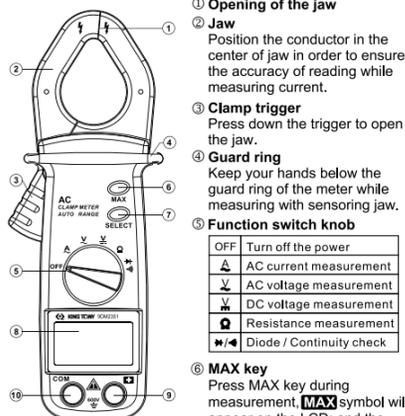
- Before replacing batteries, make sure to disconnect the clamp meter from the circuit under test.
- Replace two new batteries at the same time, and make sure you put the batteries at correct polarities.

(5) Battery replacement steps

- 1.Abort the measuring action
- 2.Turn the function switch knob back to OFF
- 3.Remove the screw on the back of casing (as drawing)
- 4.Open the battery lid
- 5.Load the new batteries
- 6.Install the battery lid into the casing and fasten it with the screw



(1) Name of parts



- ① Opening of the jaw
- ② Jaw  
Position the conductor in the center of jaw in order to ensure the accuracy of reading while measuring current.
- ③ Clamp trigger  
Press down the trigger to open the jaw.
- ④ Guard ring  
Keep your hands below the guard ring of the meter while measuring with sensing jaw.
- ⑤ Function switch knob  
OFF Turn off the power  
 AC current measurement  
 AC voltage measurement  
 DC voltage measurement  
 Resistance measurement  
 Diode / Continuity check
- ⑥ MAX key  
Press MAX key during measurement, MAX symbol will appear on the LCD; and the maximum value will be locked and renewed instantaneously. To cancel this function, just press MAX key again and MAX symbol will disappear.  
Note: This function is only applicable to , , &

- ⑦ Select key  
Transform between diode and continuity check.
- ⑧ LCD display  
Show measurement symbols, units and values



Symbols / Units	Description
	Lit when in DC mode measurement
	Lit when in AC mode measurement
	Negative polarity indicator
	Lit when incontinuity check
AUTO	Auto-ranging indicator
	Low battery indicator
	Unit for current measurement
	Unit for voltage measurement
	Unit for resistance measurement
	Maximum value lock indicator
	Lit when in diode measurement
	Measured value display

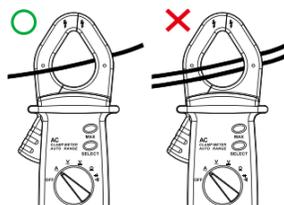
- ⑨ Terminal  
For connecting the negative input end (redtestlead) for DCV, ACV, Ω, , & measurement
- ⑩ COM Terminal  
For connecting the negative input end (blacktestlead) for DCV, ACV, Ω, , & measurement

(2) Measuring instructions

■ AC current Measurement (A)  
Measuring range: 200A-600A (2 ranges, auto-ranging)  
1.Set the function switch knob on   
2.Press down the clamp trigger to open the jaw, place one conductor in the center of the jaw (as below drawing), then read the value when it stabilizes.

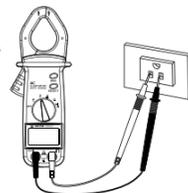
- 3.The meter will choose the appropriate range to measure automatically.
- 4.When measurement finished, set the function switch knob on OFF position to turn off the meter.

Note: If the measurement is conducted in a place with dim light, you may press MAX key to lock the value measured and read it in other places with proper illumination.



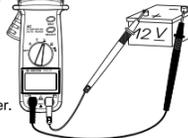
■ AC voltage measurement ( )  
Measuring range: 2V-600V (4 ranges, auto-ranging)

- 1.Set the function switch knob on
- 2.Plug the black test lead into COM terminal and the red one into terminal
- 3.Connect the test leads to the circuit under test and then read the value when it stabilizes
- 4.The meter will choose the appropriate range to measure automatically
- 5.When measurement finished, set the function switch knob on OFF position to turn off the meter.



■ DCV voltage measurement ( )  
Measuring range: 200mV-600V (5 ranges, autoranging)

- 1.Set the function switch knob on
- 2.Plug the black test lead into COM terminal and the red one into terminal
- 3.Connect the test leads to the circuit under test and then read the value when it stabilizes
- 4.The meter will choose the appropriate range to measure automatically
- 5.When measurement finished, set the function switch knob on OFF position to turn off the meter.



(6) Specification

- 1.Generalspecification:
  - Max clamp size: 30mm or 10x35mm
  - Measurement functions: , , , Ω, ,
  - Additional functions: MAX hold, auto power off
  - LCD display:  
Unit & function indication, 1999 digits as maximum reading, negative polarity indicator, overload indicator ("OL" indicating overload of resistance, beeper, diode), indicating low battery.
  - Range: Auto-ranging
  - Sampling rate: approx. 3 times per second
  - Operation temperature/Humidity:  
0°C-50°C (32°F-122°F) / below 80% R.H. (no condensation)
  - Storage temperature/Humidity:  
-10°C-60°C (14°F-140°F) / below 70% R.H. (no condensation)
  - Power supply: 2 pcs of standard UM-4 or R03 AAA batteries
  - Battery life:  
Alkaline batteries approx. 400 hours  
General batteries approx. 240 hours
  - Dimensions: 189mm(L) x 71mm(W) x 37mm(H)
  - Weight: Approx. 200g (Batteries included)

- Comply with safety standard: IEC 61010 600V CAT III Pollution degree 2
- Accessories: AAA 1.5V .....2 (inside the case)  
Test leads.....2  
Instruction manual .....1  
Carrying case.....1

- Optional accessories:  
AC Line Splitter  
(Direct measuring with no necessity to split the wire away by negative and positive independently. Hence, it also can amplify the small current by 10 times for easy reading)
- 2.Electricalspecification:  
Environment temperature / humidity: 23 ± 5°C/below 80% R.H.  
Rdg: reading digits  
Dgt: decimal digits

■ ACA measurement (set on )  
Accuracy: ±(%dgt + dgt)

Range	Resolution	AVG Accuracy	Input impedance	Maximum input current
200A	0.1A	±(1.9%rdg+10dgt)	≥100MΩ	600A
600A	1A	±(1.9%rdg+5dgt)	≥10MΩ	

■ ACV measurement (set on )  
Accuracy: ±(%dgt + dgt)

Range	Resolution	AVG Accuracy	Input impedance	Maximum input voltage
2V	0.001V	±(1.5%rdg+10dgt)	Approx. 11MΩ	600V rms
20V	0.01V	±(1.5%rdg+5dgt)	Approx. 10MΩ	
200V	0.1V	±(1.5%rdg+5dgt)	Approx. 10MΩ	

■ DCV measurement (set on )

Range	Resolution	Accuracy	Input Impedance	Maximum input voltage
200mV	0.1mV	±(0.7%rdg+3dgt)	≥100MΩ	600V
2V	0.001V	±(1.3%rdg+3dgt)	Approx. 11MΩ	
20V	0.01V	±(1.3%rdg+3dgt)	Approx. 10MΩ	
600V	1V	±(1%rdg+3dgt)	Approx. 10MΩ	

■ Resistance measurement (set on Ω )

Range	Resolution	Accuracy	Open-loop voltage	Maximum input voltage
200Ω	0.1Ω	±(1.5%rdg+5dgt)	Approx. 0.4V	600V
2KΩ	0.001KΩ	±(1.5%rdg+5dgt)	Approx. 0.4V	
20KΩ	0.01KΩ	±(1.5%rdg+5dgt)	Approx. 0.4V	
200KΩ	0.1KΩ	±(1.5%rdg+5dgt)	Approx. 0.4V	

■ Diode check (set on )

Range	Resolution	Accuracy	Open-loop voltage
2V	0.001V	±(10%rdg+5dgt)	Approx. 1.5V

■ Continuity check (set on )

Range	Resolution	Accuracy	Open-loop voltage	Maximum input voltage
200Ω	0.1Ω	The buzzer turns on for resistances lower than 60Ω±20Ω	Approx. 0.4V	600V

Specification and outward appearance of the product described above may be revised for modification without prior notice.

More instruments under the strict quality control requirement of ISO 9001 in various styles and functions can meet your requests. Please consult the agents and distributors in your territory or contact us directly.



Please wear proper safety gear while working.

