

DT-380

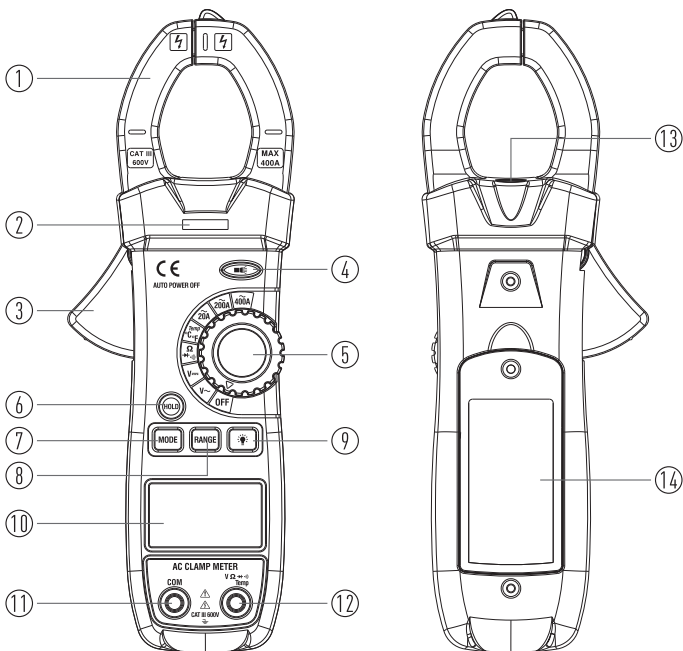
Datasheet



1-Description

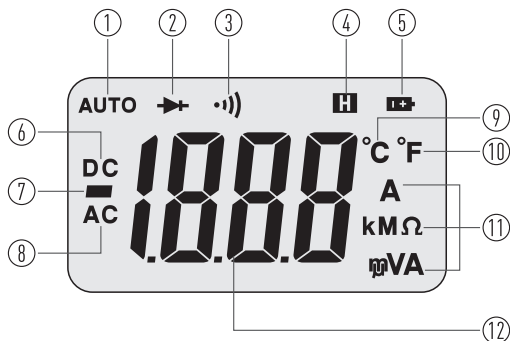
1-1.Meter Description

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|--|------------------------|
| 1-Current Clamp | 8-Range Button |
| 2-Non-Contact AC Voltage Indicator Light | 9-Back Light Button |
| 3-Clamp Trigger | 10-LCD Display |
| 4-Lighting LED Button | 11-COM Input Jack |
| 5-Rotary Function Switch | 12-Positive Input Jack |
| 6-Data Hold Button | 13-Lighting LED |
| 7-MODE Select Button | 14-Battery Cover |



1-2.Symbols Used on LCD Display

1-Auto Range Mode	7-Minus Sign
2-Diode Test Mode	8-AC (Alternating Current)
3-Audible Continuit	9-Degrees Celcius
4-Data Hold Mode	10-Degrees Fahrenheit
5-Low Battery Icon	11-Units of Measure List
6-DC (Direct Current)	12-2000 Count (0 to 1999) Measurement Reading



2.Specifications

2-1.Specifications

Function	Range	Resolution	Accuracy \pm (% of reading)
AC Voltage	200mV	0.1mV	$\pm(1.5\% + 10 \text{ digits})$
	2V	1mV	
	20V	10mV	$\pm(1.5\% + 8 \text{ digits})$
	200V	100 mV	
	600V	1V	$\pm(2.5\% + 8 \text{ digits})$

DC Voltage	200 mV	0.1mV	
	2V	1mV	$\pm(1.5\% + 2 \text{ digits})$
	20V	10mV	
	200V	100 mV	
	600V	1V	$\pm(2\% + 2 \text{ digits})$

Input Impedance: 10M Ω ; Over Rang Protection: 600V.

AC Current	20A	10mA	$\pm(2.5\% + 5 \text{ digits})$
	200A	100mA	
	400A	1A	$\pm(3\% + 5 \text{ digits})$

Over Rang Protection: Maximum input 400A; Frequency Response: 50 to 60Hz.

Resistance	200 Ω	0.1 Ω	$\pm(1.0\% + 4 \text{ digits})$
	2k Ω	1 Ω	
	20k Ω	10 Ω	$\pm(1.5\% + 4 \text{ digits})$
	200k Ω	100 Ω	
	2M Ω	1k Ω	$\pm(2.5\% + 4 \text{ digits})$
	20M Ω	10k Ω	$\pm(3.5\% + 4 \text{ digits})$

Over Rang Protection: 250V rms.


Temperature	-20 to 760°C	1°C	$\pm(3.0\% + 5^{\circ}\text{C})$
	-4 to 1400°F	1°F	$\pm(3.0\% + 8^{\circ}\text{F})$

Sensor: K Type banana Plug.

Function	Testing Condition	Reading
Diode	Forward DCA is approx. 0.3mA, backward Voltage is approx. 1.5V.	Forward voltage drop of Diode.
Continuity	Open voltage is approx. 0.5V.	Buzzer makes a long sound, While resistance is less than(50 Ω).

Over Rang Protection: 250V rms.

2-2.General Specifications

Clamp Size	Opening 1.2" (30mm) approx.
Diode Test	Test current of 0.3mA typical; Open circuit voltage 1.5V DC typical.
Continuity Check	Threshold <50 Ω ; Test current <0.5mA.
Low Battery Indication	"  " is displayed.
Overrange Indication	"OL" is displayed
Measurements Rate	2 per second, nominal
Input Impedance	10M Ω (VDC and VAC)
Display	2000 Counts LCD
AC Current	50-60Hz (AAC)
AC Voltage bandwidth	50-60Hz (VAC)
Operating Temperature	5 to 40°C (41 to 104°F)
Storage Temperature	-20 to 60°C (-4 to 140°F)
Operating Humidity	Max 80% up to 31°C (87°F) decreasing linearly to 50% at 40°C (104°F).
Storage Humidity	<80%
Operating Altitude	7000ft. (2000meters) maximum.
Over Voltage	Category III 600V
Battery	2 x 1.5V "AAA" Battery
Auto OFF	approx. 15 minutes
Safety	For indoor use and in accordance with Overvoltage Category II, Pollution Degree 2. Category II includes local level, appliance, portable equipment, etc., with transient overvoltages less than Overvoltage Cat III.

3.Button Function

3-1.MODE Button

To select °C/°F, OHM/ Diode/Continuity.

3-2.DATA HOLD Button

- To freeze the LCD meter reading, press the **DATA HOLD** Button.
- While data hold is active, the HOLD display icon appears on the LCD.
- Press the **DATA HOLD** Button again to return to normal operation.

3-3.RANGE Button

- When the meter is first turned on, it automatically goes into Auto Ranging.
- This automatically selects the best range for the measurements being made and is generally the best mode for most measurements.
- For measurement situations requiring that a range be manually selected, perform the following:
 - 1.Press the **RANGE** Button, The “Auto Range” display indicator will turn off, The “Manual Range” display indicator will turn on.
 - 2.Press the **RANGE** Button to step through the available ranges until you select the range you want.
 - 3.Press and hold the **RANGE** Button for 2 seconds to exit the Manual Ranging mode and return to Auto Ranging.

3-4.BACK LIGHT Button

- Press the **Back light** button for over 2 second to turn the backlight on.
- Press again for over 1 second to turn the backlight off.

3-5.FLASH LIGHT LED Button

- Press the Flash Light LED button for over 1 second to turn the light on.
- Press again to shut off LED.