


## INTRODUCTION

This 3 5/6 digits display clamp meter is a stable and battery powered meter. It has 20mm LCD screen making the readings more clear with 15 seconds backlight display and overload protection, makes it easier to use. It can be used to test DCV, ACV, DCA, ACA, Resistance, Capacitance, Diode, Temperature, Continuity testing and Frequency. To assure high accuracy and resolution, it uses an 8-bit microprocessor and a dual integral A/D convertor IC. It is an ideal tool for labs, factories radio-technology and household

The instrument is designed according to IEC1010 standard (safety standard issued by International Electro technical Committee), CATIII600V and UL3111-1

## GENERAL SPECIFICATION

- Display : LCD display.
- MAX.Display : 5999 digits (3 5/6) auto polarity display.
- Measuring method : ADC+MCU.
- Sampling rate : 3times/second.
- Overload display : "OL" displayed.
- Low battery indication : "  " symbol displayed.
- Data Hold Facility
- Relative Measurement
- Auto Power Off
- Working environment : (0 ~ 40) °C Relative humidity <80%.
- Power source : 2pcs 1.5V AAA
- Dimension : 280x70x45mm (length\*width\*height)
- Weight : about 300g (including the 1.5Vbattery)
- Jaw Dia: 30mm

Accessories : User manual, bag, a pair of test leads, temperature probe, battery.

## TECHNICAL SPECIFICATIONS

Accuracy: (reading\*a% +digits).

1) To assure accuracy, the environment temperature should be (23±5) °C, relative humidity be <75%.



**DC VOLTAGE**

Range	Accuracy	Resolution
600mV	(0.5%+3)	0.1mV
6V		0.001V
60V		0.01V
600V		0.1V
1000V	(0.8%+10)	1V

Input impedance : 10MΩ.  
 Overload protection : 200mV range : 550V DC or AC Peak value.  
 Other ranges : 1000V DC or AC 750V Peak value

**ACV VOLTAGE (T-RMS)**

Range	Accuracy	Resolution
600mV	(0.8%+5)	0.1mV
6V		1mV
60V		10mV
600V		100mV
750V	(1.2%+10)	1V

Input impedance : 10MΩ.  
 Standard sine wave and Triangular wave : 40Hz-1 kHz  
 Other waveform : 40Hz-200Hz.

**DC AMPERE (Only DT-3690 has 60A/600A/1000A)**

Range	Accuracy	Resolution
600uA*	(0.8%+10)	0.1uA
6000uA*		0.001mA
60A	(2.0%+30)	0.01A
600A		0.1A
1000A		1A

**\*Input from terminal and not the clamp jaw**  
**Max. Measurement voltage dorp** : 600mV.  
 Overload protection : 600uA/6000uA, 0.6A/250V resettable fuse  
 60A/600A/1000A,measured from the center of clamp sensor input.

**AC AMPERE (T-RMS)**

Range	Accuracy	Resolution
600uA*	(0.8%+5)	0.1uA
6000uA *		0.001mA
60A	(2%+30)	0.01A
600A		0.1A
1000A		1A

**\*Input from terminal and not the clamp jaw**  
**Max. Measurement voltage dorp** : 600mV.  
 Overload protection : 600uA/6000uA, 0.2A/250V resettable fuse. Positive input terminal : VΩ, negative input terminal : COM.  
 60A/600A/1000A,measured from the center of clamp sensor input.  
**Frequency response** : Sin wave and Triangular wave : 40Hz-1Kz  
 Other waveform : 40Hz-200Hz  
 Display : TRMS value

**RESISTANCE**

Range	Accuracy	Resolution
600Ω	(0.8%+5)	0.1Ω
6KΩ	(0.8%+3)	1Ω
60KΩ		10Ω
600KΩ		100Ω
6MΩ		1KΩ
60MΩ	(1.0%+25)	10KΩ

Open circuit: less than 3V.  
 Overload protection : 550V DC or AC peak value.

**CAPACITANCE**

Range	Accuracy	Resolution
60nF	(3.5%+20)	10pF
600nF		100pF
6uF		1nF
60uF	(5.0%+10)	10nF
600uF		100nF
6000uF		1uF

Overload protection : 550V DC or AC Peak value.

**FREQUENCY**

Range	Accuracy	Resolution
10Hz	(0.1%+3)	0.01Hz
100Hz		0.1Hz
1kHz		1Hz
10kHz		10Hz
100kHz		100Hz
1MHz/20MHz		1kHz/10kHz



Input sensitivity : 1Vrms

Overload protection : 550V DC or AC peak value  
 (less than 10 seconds).

**TEMPERATURE**

Range	Accuracy	Resolution
(-20~1000)°C	(1.0%+5) <400°C	1°C
(0~1832)°F	(0.75%+5) <750°F	1°F

**DIODE & CONTINUITY TEST**

Range	Description	Test Condition
	Diode forward voltage drop	Forward DC current is approx 1mA, reverse voltage is approx 3V
	When the resistance under test is less than 50±20Ω, buzzer sounds continuously.	Open circuit voltage: 3V. Press "SELECT" to switch the functions.

