

## DIGITAL TRUE RMS AC/DC CLAMP METER DT36T

**APPLICATION:** This is a 3½ Digits Auto range True RMS Clamp Meter with Backlight. This instrument can be used to measure AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Frequency, Non-Contact Voltage detection, true RMS measurement and other parameters. It is an ideal tool for the Electricians, Engineers, Factories, Industries, Laboratories, Students, Household.

### FEATURES:

- Display: 3½ 5999 Count LCD Display with Backlight & Torch.
- Non-Contact AC Voltage Detector.
- Low Battery Indication
- Overload Protection
- Over Range Indication,
- Auto Ranges.
- The Maximum allowable voltage between the measuring terminal and the earth: 600V DC or 600V AC RMS.
- Reading Rate: 3 times/sec.
- Operating Temperature & Humidity: 0°C To 40°C, <80%RH
- Storage Temperature & Humidity: -10°C To 60°C, <70%RH
- Clamp Jaw Opening Size: 28mm
- **CAT II 600V**
- Power supply: 1 X 9V Battery
- Display Size: 35 x 18 mm
- Unit Size: 209×76×40mm
- Weight: 195gm (Including Batteries)



### SPECIFICATION:

#### **DC Voltage**

| Ranges | Resolution | Accuracy                |
|--------|------------|-------------------------|
| 600mV  | 0.1mV      | ± (0.8% of reading + 2) |
| 6V     | 0.001V     |                         |
| 60V    | 0.01V      |                         |
| 600V   | 0.1V       | ± (1% of reading + 2)   |

- Input impedance: 10MΩ, overload protection: 600mV range: 250V DC or AC (RMS), 6V-600V range: 600V DC or 600V AC (RMS)
- Maximum input Voltage: 600V DC

#### **AC Voltage**

| Ranges | Resolution | Accuracy                      |
|--------|------------|-------------------------------|
| 6V     | 0.001V     | ± (1.2% of reading + 10words) |
| 60V    | 0.01V      |                               |
| 600V   | 0.1V       | ± (1.5% of reading + 10words) |

- Input impedance: 10MΩ.
- Over load Protection:** 600V DC or 600V AC (RMS),
- Frequency Range: 40Hz~1kHz. TRMS

## LowZ DC/AC Voltage Measurement

| Range      | Resolution | Accuracy                  |
|------------|------------|---------------------------|
| 600V DC/AC | 0.1V       | ±(0.8% reading + 2 words) |

- Input impedance: 1MΩ
- Measuring frequency range: 40Hz~1000Hz
- Maximum allowable input voltage: 600V DC or 600V AC RMS

## AC and DC CURRENT

| RANGE | RESOLUTION | ACCURACY            |
|-------|------------|---------------------|
| 60A   | 0.01A      | ±(4% reading + 10 ) |
| 600A  | 0.1A       |                     |

Maximum input Current: 600A AC

Frequency Range: 50Hz~60Hz

Response: True RMS

## NCV (NON CONTACT AC VOLTAGE DETECTOR)

| FUNCTION | FREQUENCY    | VOLTAGE   |
|----------|--------------|-----------|
| NCV      | 50Hz – 500Hz | 90V-1000V |

Do not input voltage in NCV mode

## RESISTANCE

| RANGE | RESOLUTION | ACCURACY               |
|-------|------------|------------------------|
| 600Ω  | 0.1Ω       | ±(1.2% of reading + 2) |
| 6kΩ   | 0.001kΩ    |                        |
| 60kΩ  | 0.01kΩ     |                        |
| 600kΩ | 0.1kΩ      |                        |
| 6MΩ   | 0.001MΩ    |                        |
| 60MΩ  | 0.1MΩ      | ±(2.0% of reading + 5) |

-Open circuit Voltage: above 0.4V

-Overload protection: 250V DC or AC (RMS)

## FREQUENCY :

Clamp head frequency measurement (through A file)

| RANGE | RESOLUTION | ACCURACY               |
|-------|------------|------------------------|
| 600Hz | 0.1kHz     | ±(1.5% of reading + 5) |
| 1kHz  | 0.001kHz   |                        |
| >1kHz | 0.001kHz   | Just for reference     |

- Measurement range: 10 Hz to 1 kHz
- Input Signal Range: ≥5A AC (Input current will increase, with the increase of the measured frequency)
- Maximum input voltage: 600A

## Through V file

| RANGE  | RESOLUTION | ACCURACY               |
|--------|------------|------------------------|
| 600Hz  | 0.1Hz      | ±(1.5% of reading + 5) |
| 6kHz   | 0.001kHz   |                        |
| 10kHz  | 0.01kHz    |                        |
| >10kHz | 0.01kHz    | Just for reference     |

- Measurement range: 10 Hz to 10 kHz
- Input Signal Range: ≥0.2V AC (Input current will increase, with the increase of the measured frequency)
- Input impedance: 10MΩ
- Maximum input voltage: 600V AC (RMS)

## DUTY CYCLE:

| RANGE  | RESOLUTION | ACCURACY |
|--------|------------|----------|
| 10-95% | 0.1%       | ±3%      |

## Through the A file (from the clamp head):

- Frequency response: 10 ~ 1kHz
- Input Current Range: ≥1A AC (Input current will increase, with the increase of the measured frequency)
- Maximum input voltage: 600A

## Through the V file:

- Frequency response: 10 ~ 10kHz
- Input Voltage Range: ≥0.2V AC (Input current will increase, with the increase of the measured frequency)
- Input impedance: 10MΩ
- Maximum input voltage: 600V AC (RMS)

## CAPACITANCE

| RANGE | RESOLUTION | ACCURACY               |
|-------|------------|------------------------|
| 60nF  | 0.01nF     | ±(4.0% of reading + 3) |
| 600nF | 0.1nF      |                        |
| 6μF   | 0.001μF    |                        |
| 60μF  | 0.01μF     |                        |
| 600μF | 0.1μF      |                        |
| 6mF   | 0.001mF    |                        |
| 60mF  | 0.01mF     |                        |

Overload protection: 250V DC or AC (RMS)

## DIODE

| RANGE                                                                               | RESOLUTION | FUNCTION                                     |
|-------------------------------------------------------------------------------------|------------|----------------------------------------------|
|  | 0.001V     | Display diode forward voltage approximation. |

- Forward DC Current is about 1mA
- Reverse DC Voltage is about 3.2V
- Overload Protection: 250V DC or AC (RMS)

## CONTINUITY TEST

| RANGE                                                                             | RESOLUTION | FUNCTION                                                                                       |
|-----------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------|
|  | 0.1Ω       | If the measured line resistance is less than 50Ω, the buzzer inside the instrument will sound. |

- Open circuit Voltage is about 2.5V.
- **Overload protection:** 250V DC or AC (RMS)

## ACCESSORIES:

Instruction Manual, 1 Set of Test Lead, 9V Battery & carrying Pouch.

