

# PROVA A3

## AC/DC Clamp Meter



IEC 61010

CAT III 600V CAT IV 300V

### Features:

1. Best resolution of AC/DC current measurement: **10mA**.
2. AC/DC current measurement: **400A**.
3. AC/DC voltage measurement: **600V**.
4. AC current measurement: **Average Sensing**.
5. **Resistance, Continuity, Capacitance and Temperature** ( $^{\circ}\text{C}/^{\circ}\text{F}$ ) measurement.
6. Non-contact (A) and Contact (V) **Frequency** measurement.
7. Voltage/Current **Peak value** measurement.
8. **Auto range**: V, A, Resistance, Capacitance and Temperature.
9. **Auto** and **Manual** ranges.
10. **6000 counts**.
11. **One Touch Zero** for DCA adjustment.
12. **25mm** large jaw diameter.
13. **Auto-power-off** function (30 min.).
14. With **backlight**.
15. Max Hold, Peak Hold and **Delta** ( $\Delta$ ) functions.
16. **Dual display**: Hold + Ave, MAX + MIN,  $\Delta$ MAX +  $\Delta$ MIN.
17. **Dual display**: Hold + Ave, Peak Max + Peak Min,  $\Delta$ Peak Max +  $\Delta$ Peak Min.
18. On-line automotive battery and alternator testing Min battery cranking voltage and Max alternator charging voltage.
19. **Low Pass Filter** (LPF, 1KHz, -3dB) (e.g. for VFD measurement).
20. **600V overload protection** for **Resistance** ( $\Omega$ ) and **Capacitance** measurement.
21. Ideal for works in crowded switch box or cable areas.

## 22. Applications:

- (1) Troubleshooting in
  - i. Automotive Maintenance
  - ii. electric vehicle
  - iii. plant maintenance
  - iv. HVAC
  - v. telecom works
  - vi. marine
  - vii. motorcycle repairs
- (2) DC charging current of batteries of electric vehicles.
- (3) DC current consumption of DC motors of Drones.
- (4) DC current output of solar panels.
- (5) Measurements of voltage, current, and frequency of inverters (VFD).
- (6) Temperature measurements of abnormal components.

## Electrical Specifications: (23°C±5°C)

### DC Current

Range	Resolution	Accuracy	Overload Protection
60 A	10mA	±1.5%±2dgts	DC 400A
0-150 A	100mA	±1.5%±2dgts	
150-300 A	100mA	±2.2%±2dgts	
300-400 A	100mA	±4%±2dgts	

**DCA Peak MAX ±400A** Accuracy + additional ±2%±50dgts

### AC Current

Range	Resolution	Accuracy		Overload Protection
		50/60 Hz	40 - 500Hz	
60A	10mA	±1.5%±3dgts	±2.0%±4dgts	AC 400A
0-150A	100mA	±1.5%±3dgts	±2.0%±4dgts	
150-300A	100mA	±2.2%±3dgts	±2.5%±4dgts	
300-400A	100mA	4%±3dgts	5%±4dgts	

**ACA Peak MAX ±400A** Accuracy + additional ±2%±50dgts

**LPF @1KHz -3db**

### DC Voltage (Overload Protection 600V)

Range	Resolution	Accuracy	Input Impedance
60V	10 mV	±1.5%±3dgts	10MΩ
600V	100 mV		

**DCV Peak MAX ±600V** Accuracy + additional ±2%±50dgts

**AC Voltage** (Input Impedance 10 MΩ)

Range	Resolution	Accuracy		Overload Protection
		50/60 Hz	40 - 1KHz	
60V	10mV	±1.5%±5dgts	±2.0%±5dgts	AC 600V
600V	100mV			

**ACV Peak MAX** ±850V Accuracy + additional ±2%±50dgts

**LPF @1KHz -3db**

**Continuity** (Open voltage 0.4V, Overload protection AC 600V)

Range	Resolution	Accuracy	Beeping
600Ω	0.1Ω	±1.0%±2dgts	<30.0Ω (approx.)

**Resistance (Ω)** (Open voltage 0.4V)

Range	Resolution	Accuracy	Overload Protection
600Ω	0.1Ω	±1.5%±2dgts	AC 600V
6KΩ	1Ω		
60KΩ	10Ω		
600KΩ	100Ω		

**Frequency (Auto range)**

Range (Hz)	Resolution (Hz)	Accuracy	Sensitivity	Overload Protection
4-99.99	0.01	±0.5%±0.02	V: 3V/10V A: 1A/5A	AC 600V
100.0-999.9	0.1	±0.5%±0.2	V: 2V/10V A: 1A/5A	
1.000K-9.999K	10	±0.5%±20		
10.00K-99.99K	1.2K	±0.5%±2.4K		
100.0K-200.0K	5K	±0.5%±10K		AC400A

**Temperature** (for using K-Type thermocouples, °C or °F)

Range	Resolution	Accuracy	Overload Protection
-40 – 0 °C	0.1 °C	±2.0%±2 °C	AC 300V
0 – 400 °C	0.1 °C	±0.5%±2 °C	
-40 – 32 °F	0.1 °F	±2%±3.6 °F	
32 – 752 °F	0.1 °F	±0.5%±3.6°F	


**Diode Test**

Range	Resolution	Accuracy	Overload Protection
0 – 1.999V	0.001V	±2.5%±5dgts	AC 600V

## Capacitance

Range	Resolution	Accuracy	Overload Protection
600nF	0.1nF	$\pm 2.0\% \pm 0.2 \text{ nF}$	AC 600V
6 $\mu$ F	1nF	$\pm 2.0\% \pm 0.02 \mu \text{ F}$	
60 $\mu$ F	10nF	$\pm 2.0\% \pm 0.02 \mu \text{ F}$	
600 $\mu$ F	100nF	$\pm 2.0\% \pm 0.2 \mu \text{ F}$	
6000 $\mu$ F	1 $\mu$ F	$\pm 2.5\% \pm 5 \mu \text{ F}$	

## General Specifications: Indoor Use

<b>Conductor Size:</b>	25mm max. (approx.)
<b>Battery Type:</b>	two 1.5V SUM-3
<b>Display:</b>	6000 counts
<b>Range Selection:</b>	Auto and Manual
<b>Overload Indication:</b>	OL
<b>Power Consumption:</b>	17 mA (approx.)
<b>Low battery Indication:</b>	
<b>Sampling Time:</b>	2 times/sec.
<b>Auto-power-off:</b>	30 minutes
<b>Operating Temperature:</b>	0°C to 50°C
<b>Operating Humidity:</b>	less than 85% relative
<b>Altitude:</b>	up to 2000M
<b>Storage Temperature:</b>	-20°C to 60°C
<b>Storage Humidity:</b>	less than 75% relative
<b>Dimension:</b>	190mm (L) x 66mm (W) x 36mm (H) 7.5" (L) x 2.6" (W) x 1.45" (H)
<b>Weight:</b>	250g (battery included)
<b>Accessories:</b>	Carrying bag x 1 Users manual x 1 1.5V battery x 2 Test leads x 1 K-type thermocouples x 1 Adaptor (for Capacitance and K-type thermocouples) x 1

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