

PROVA A1

AC/DC Clamp Meter (TRMS)

CE

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: **TRMS**.
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** (Δ) functions.
16. **Dual display**: Hold + Ave, MAX + MIN, Δ MAX + Δ MIN.
17. **Dual display**: Hold + Ave, Peak Max + Peak Min, Δ Peak Max + Δ 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** (Ω) 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 (True RMS)

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 (True RMS, 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 μ F	1nF	$\pm 2.0\% \pm 0.02 \mu \text{ F}$	
60 μ F	10nF	$\pm 2.0\% \pm 0.02 \mu \text{ F}$	
600 μ F	100nF	$\pm 2.0\% \pm 0.2 \mu \text{ F}$	
6000 μ F	1 μ F	$\pm 2.5\% \pm 5 \mu \text{ F}$	

General Specifications: Indoor Use

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

PROVA INSTRUMENTS INC.

Add: 6F-2, No. 129, Lane 235, Pao-Chiao Road, Shin-Tien District,
New Taipei City 23145, TAIWAN

Tel: 886-2-89191255

Fax: 886-2-89191489

E-mail: prova@ms3.hinet.net

Website: www.prova.com.tw