

# PROVA A1/A3

## DC/AC Clamp Meter

**CE** CAT III 600V, CAT IV 300V

### Features:

1. **High resolution** DC/AC 10 mA current measurement (<60A range).
2. DC/AC current measurement: **60/400A**.
3. DC/AC voltage measurement: **60/600V**.
4. AC current measurement: **TRMS (model A1)**.
5. AC current measurement: **Average Sensing (model A3)**.
6. **Resistance, Continuity, Capacitance** and **Temperature** (°C/°F) measurement.
7. Non-contact (A) and Contact (V) **Frequency** measurement.
8. Voltage/Current **Peak value** measurement.
9. **Auto range:** V, A, Resistance, Capacitance and Temperature.
10. **One Touch Zero** for DCA adjustment.
11. **25mm** large jaw diameter.
12. Auto-power-off function (30 min.).
13. With **backlight**.
14. Max Hold, Peak Hold and Delta (**Δ**) functions.
15. **Dual display:** Hold + Average, Max + Min, **Δ**Max + **Δ**Min.
16. **Dual display:** Peak Max + Peak Min, **Δ**Peak Max + **Δ**Peak Min.
17. On-line automotive battery and alternator testing Min battery cranking voltage and Max alternator charging voltage.
18. **Low Pass Filter** (LPF, 1KHz) (for VFD measurement).
19. **600V overload protection** for ohm and measurement.
20. Ideal for works in crowded switch box or cable areas.
21. **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 + (±2%±50dgts)

### AC Current (A1: True RMS, A3: Average Sensing)

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 + (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 + (±2%±50dgts)

### AC Voltage (A1: True RMS, A3: Average Sensing) (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 + (±2%±50dgts)

**LPF @1KHz -3db**

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

Range	Resolution	Accuracy	Beeping
60-600Ω	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  AC400A
100.0~999.9	0.1	±0.5%±0.2	V:2V/10V A:1A/5A	
1.000K-9.999K	10	±0.5%±20	V:2V/10V A:1A/5A	
10.00K-99.99K	1.2K	±0.5%±2.4K	V:2V/10V A:1A/5A	
100.0K-200.0K	5K	±0.5%±10K	V:2V/10V A:1A/5A	

**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 $\mu\text{F}$	1nF	$\pm 2.0\% \pm 0.02 \mu\text{F}$	
60 $\mu\text{F}$	10nF	$\pm 2.0\% \pm 0.02 \mu\text{F}$	
600 $\mu\text{F}$	100nF	$\pm 2.0\% \pm 0.2 \mu\text{F}$	
6000 $\mu\text{F}$	1 $\mu\text{F}$	$\pm 2.5\% \pm 5 \mu\text{F}$	

## 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 Adapter (for Capacitance and K-type thermocouples) x 1

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