PROVA A7

AC/DC TRMS Clamp Meter

CE IEC 61010

CAT III 600V

CAT IV 300V



Features:

- High resolution AC/DC 10 mA current measurement (<40A range).
- AC/DC current measurement: 40A/ 400A.
- AC/DC voltage measurement: 4V/ 40V/ 400V/ 1000V.
- True RMS measurement of AC current and voltage.
- Resistance, Continuity, Capacitance and Temperature (°C or °F) measurement.
- Auto and full ranges: V, A, Resistance, Capacitance and Temperature.
- One Touch Zero for DCA adjustment.
- 25mm large jaw diameter.
- AC/DC current accuracy ±1%±3dgts (<100A).

- AC/DC voltage accuracy ±0.5%±2dgts.
- Resistance accuracy ±0.8%±2dgts (40/400/4K/40K/400K/4000K/40MΩ).
- Capacitance accuracy ±0.8%±3dgt (40n/400n/4u/40u/400u/4m/40mF).
- Temperature (°C, fixed at the factory) best accuracy ±0.5%±0.5°C (-200.0 to 1300°C).
- Temperature (°F, fixed at the factory) best accuracy ±0.5%±0.9°F (-328.0 to 2372°F).
- Auto-power-off function (15 minutes).
- Continuity test.
- Backlight.
- Maximum, minimum, and hold functions.
- 600V overload protection for ohm measurement.
- Ideal for works in crowded switch box or cable areas.

Electrical Specifications: (23°C±5°C)

DC Current (auto-range, accuracy is % of reading ± digits, conductor is placed at the center of jaws, zero reading before measurement)

| Range (A) | Resolution | Accuracy | Overload Protection |
|---------------|------------|-------------|---------------------|
| 0.00 - 40.00 | 10mA | ±1.0%±3dgts | |
| 40.0 – 100.0 | | ±1.0%±3ugis | |
| 100.0 – 150.0 | | ±1.5%±3dgts | DC 500A |
| 150.0 – 200.0 | 100mA | ±2.2%±3dgts | DC 300A |
| 200.0 – 300.0 | | ±4.0%±3dgts | |
| 300.0 – 400.0 | | ±7.0%±3dgts | |

AC Current (auto-range, true RMS, crest factor ≤ 3 , accuracy is % of reading \pm digits, conductor is placed at the center of jaws)

| Range (A) | Resolution | Accuracy | | Overload |
|---------------|------------|-------------|--------------|------------|
| | | 50/60 Hz | 40 - 400Hz | Protection |
| 0.00 - 40.00 | 10mA | ±1.0%±3dgts | ±1.5%±3dgts | |
| 40.0 – 100.0 | | ±1.0%±3ugis | ±1.5 %±3ugts | |
| 100.0 – 150.0 | | ±1.5%±3dgts | ±2.0%±3dgts | AC 500A |
| 150.0 – 200.0 | 100mA | ±2.2%±3dgts | ±2.5%±3dgts | AC 500A |
| 200.0 – 300.0 | | ±4.0%±3dgts | ±4.0%±3dgts | |
| 300.0 – 400.0 | | ±8.0%±3dgts | ±8.5%±3dgts | |

DC Voltage (auto-range, accuracy is % of reading \pm digits, input impedance 10M Ω)

| Range (V) | Resolution | Accuracy | O.L. Protection |
|---------------|------------|---------------|-----------------|
| 0.000 - 4.000 | 0.001V | | |
| 4.00 - 40.00 | 0.01V | 10 E0/ 12data | DC 1000V |
| 40.0 - 400.0 | 0.1V | ±0.5%±2dgts | DC 1000V |
| 400 – 1000 | 1V | | |

AC Voltage (auto-range, true RMS, crest factor \leq 3, accuracy is % of reading \pm digits, input impedance 10 M Ω)

| Range (V) | Resolution | Accuracy | | Overload |
|---------------|------------|---------------|-------------|------------|
| | | 50/60 Hz | 40 - 1KHz | Protection |
| 0.000 - 4.000 | 0.001V | | ±0.8%±3dgts | AC 1000V |
| 4.00 - 40.00 | 0.01V | 10 E0/ 12data | | |
| 40.0 - 400.0 | 0.1V | ±0.5%±2dgts | | |
| 400 - 1000 | 1V | | | |

Continuity (accuracy is % of reading ± digits, open voltage 0.4V, overload protection AC 600V)

| Range (Ω) | Resolution | Accuracy | Beeping |
|-------------|------------|-------------|---------|
| 0.0 - 400.0 | 0.1Ω | ±0.8%±2dgts | <30.0Ω |

Resistance (Ω) (auto-range, open voltage 0.4V, accuracy is % of reading \pm digits)

| Range (Ω) | Resolution (Ω) | Accuracy | Overload Protection |
|---------------------------|----------------|-------------|---------------------|
| 0.00 - 40.00 ¹ | 0.01 | | |
| 40.0 - 400.0 | 0.1 | | |
| 400 - 4000 | 1 | | |
| 4.00K - 40.00K | 0.01K | ±0.8%±2dgts | AC 600V |
| 40.0K - 400.0K | 0.1K | | |
| 400K - 4000K | 1K | | |
| 4.00M - 40.00M | 0.01M | | |

¹ When the resistance is < 20Ω at 40.00Ω range, to obtain listed accuracy users must short the test leads and zero the value before measurement. However, when the zero button is pressed the meter will be locked at 40.00 range, and the resistance values > 40Ω will be displayed as OL.

Capacitance¹ (auto-range, accuracy is % of reading ± digits and thin film capacitor or better is used)

| Range (F) | Resolution (F) | Accuracy | Overload Protection |
|------------------------------|----------------|-------------|---------------------|
| 1.000n - 4.000n ² | 0.001n | ±1.5%±3dgts | |
| 4.00n - 40.00n | 0.01n | | |
| 40.0n - 400.0n | 0.1n | | |
| 0.400u - 4.000u | 0.001u | | AC 600V |
| 4.00u - 40.00u | 0.01u | ±0.8%±3dgts | AC 600V |
| 40.0u - 400.0u | 0.1u | | |
| 0.400m - 4.000m | 0.001m | | |
| 4.00m - 40.00m ³ | 0.01m | | |

¹ There is less than 0.030nF residual reading left on the LCD in the 4nF range.

The smaller the capacitance value, the shorter the measurement time.

² In the 4nF range, the length of test leads must be less than 10 cm (including test prod or alligator clip) to obtain the listed accuracy.

³ Maximum measuring time of 40mF would take around 13 seconds.

Temperature¹ (auto-range, K-Type thermocouples, $^{\circ}$ C or $^{\circ}$ F is fixed at the factory, accuracy is $^{\circ}$ 6 of reading $^{\pm}$ digits)

| Range | Resolution | Accuracy | Overload Protection |
|--------------------|------------|-------------------|---------------------|
| -200.0 to -100.0℃ | 0.1℃ | ±1.5%±0.2℃ | |
| -100.0 to 400.0℃ | 0.1℃ | ±0.5%±0.5℃ | |
| 400 to 1000℃ | 1℃ | ±0.5%±2℃ | |
| 1000 to 1300℃ | 1℃ | ±0.8%±2℃ | AC 600V |
| -328.0 to -148.0°F | 0.1°F | ±1.5%±0.4°F | AC 600V |
| -148.0 to 999.9°F | 0.1°F | ±0.5%±0.9°F | |
| 1000 to 1832°F | 1°F | ±0.5%±4 °F | |
| 1832 to 2372°F | 1°F | ±0.8%±4°F | |

¹ The accuracy of K type thermocouple is not included in the listed accuracy.

General Specifications: Indoor Use

Conductor Size: 0.98" / 25mm max. (approx.)

Battery Type: two 1.5V LR03 AA Size

Display: 3 3/4 LCD with 20 seg. bargraph

Range Selection: Auto
Overload Indication: OL

Power Consumption: 22mA (approx., without backlight)

Low battery Indication:

Sampling Time: 3 times/sec. (display), 30 times/sec.. (bargraph)

Auto-power-off: 15 minutes

Operating Temperature: -10°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: 220g (battery included)

Accessories: Carrying bag x 1, Users manual x 1

1.5V battery x 2, Test leads x 1 set

K-type thermocouples x 1

Adapter (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

E-mail: prova@ms3.hinet.net **Website:** www.prova.com.tw