

PROVA 2022

AC/DC HVAC TRMS Clamp Meter

Dream Clamp:

*Big clamp (2000A)
Measures low
current (0.01A)*

Multiple Current Sensors Patents

Taiwan M582592
China CN209728026U
France FR3092400
Germany 20 2019 106 212
Japan 3223244
USA 10,788,519



CE
IEC 61010

CAT III 600V

Comparison of PROVA 2022, 2021, 2020H:

	2022	2021	2020H
AC/DC 40.00A	Yes	Yes	No
DC 400/1500 uA	Yes	Yes	Yes
AC 400/1200 uA	Yes	Yes	No
HVAC	Yes	Yes	Yes
LPF	Yes	Yes	Yes
LoZ AC/DC V	Yes	No	No
NCV	Yes	No	No

Features:

- **AC/DC current** measurement: 40.00A/ 400.0A/ 2000A.
- **True RMS** measurement of AC current and voltage.
- **LoZ (Low input impedance)** measurement of AC/DC voltage measurement.
- **Auto and full ranges:** V, A, Resistance, Continuity, Diode, Capacitance, Micro Current and Temperature. With AI intelligence, the attributes and ranges of Resistance, Continuity, Diode, Capacitance can be automatically determined.
- **Non-contact voltage** detection (NCV).
- **One Touch Zero** for DCA adjustment.
- **55mm** large jaw diameter.
- **Low Pass Filter (LPF)** at 1 KHz (-3dB) Cut-off Frequency.
- **Fast bar graph** display (30 times/sec.) for transient observation.
- Large 3 3/4 digits **LCD**.
- **In-Rush (INR) Current** Measurement with 100mS integration time.
- **AC/DC voltage** accuracy: $\pm 0.5\% \pm 2\text{dgts}$ (4/40/400/1000V).
- **AC/DC uA current** accuracy: $\pm 0.5\% \pm 2\text{dgts}$ (400.0uA/4000uA).
- **Resistance** accuracy: $\pm 0.8\% \pm 2\text{dgts}$ (40/400/4K/40K/400K/4000K/40M Ω)/
- **Capacitance** accuracy: $\pm 0.8\% \pm 3\text{dgts}$ (4n/40n/400n/4u/40u/400u/4m/40mF).
- **Temperature** measurement: $^{\circ}\text{C}$ or $^{\circ}\text{F}$.
- Temperature $^{\circ}\text{C}$ best accuracy: $\pm 0.5\% \pm 0.5^{\circ}\text{C}$ (-200.0 ~ 1300 $^{\circ}\text{C}$).
- Temperature $^{\circ}\text{F}$ best accuracy: $\pm 0.5\% \pm 0.9^{\circ}\text{F}$ (-328.0 ~ 2372 $^{\circ}\text{F}$).
- **Auto-power-off** function (15 minutes).
- **Continuity** test and **Diode** Measurement.
- Maximum, minimum and hold functions.
- **600V overload protection** for ohm / capacitance measurement.
- **Backlight**

Electrical Specifications: (23°C±5°C, Accuracy is % of reading ± digits)

40A DC (Manual-range, conductor is placed at the center of jaws, zero reading before measurement)

Range (A)	Resolution	Accuracy	Overload Protection
0.00 - 10.00A	10mA	±2.0%±6dgts	DC 3000A
10.00 - 40.00A		±1.5%±3dgts	

¹ The specification of this range can only be reached after the meter is turned on for 5 min.

40A AC (Manual-range, true RMS, Crest Factor ≤ 3, conductor is placed at the center of jaws)

Range (A)	Resolution	Accuracy (50/60Hz)	Accuracy (40-1KHz)	Overload Protection
0.00 - 10.00A	10mA	±2.0%±6dgts	±2.5%±6dgts	AC3000A
10.00 - 40.00A		±1.5%±5dgts	±2.5%±5dgts	

¹ The specification of this range can only be reached after the meter is turned on for 5 min.

DC Current (Auto-range, conductor is placed at the center of jaws, zero reading before measurement)

Range (A)	Resolution	Accuracy	Overload Protection
0.0 - 400.0A	100mA	±1.5%±3dgts	DC 3000A
400 - 2000A	1A		

AC Current (Auto-range, true RMS, Crest Factor ≤ 3, conductor is placed at the center of jaws)

Range (A)	Resolution	Accuracy (50/60Hz)	Accuracy	Overload Protection
0.0 - 400.0A	100mA	±1.5%±5dgts	±2.5%±5dgts (40-1KHz)	AC3000A
400 - 2000A	1A	±2.0%±5dgts	±2.5%±5dgts (40-400Hz)	

DC uA (Auto-range, Input impedance: 1.6KΩ)

Range (uA)	Resolution	Accuracy	Overload Protection
0.0 - 400.0	0.1uA	±0.5%±2dgts	AC 600V
400 - 1500	1uA		

¹ The inputs of the DC uA measurement are via uA and COM terminals.

AC uA (Auto-range, Input impedance: 1.6KΩ)

Range (uA)	Resolution	Accuracy (50/60Hz)	Accuracy (40-1KHz)	Overload Protection
0.0 - 400.0	0.1uA	±0.5%±2dgts	±0.5%±5dgts	AC 600V
400 - 1200	1uA			

¹ The inputs of the AC uA measurement are via uA and COM terminals.

Voltage Frequency (Auto range, periodic and zero crossing signal)

Range	Range (Hz)	Resolution	Sensitivity	Accuracy
1000V	0.0 – 400.0	0.1Hz	0.8V	±0.5%±2dgts
	0.400K – 4.000K	1Hz		
	4.00K – 40.00K	10Hz		

Current Frequency (Auto range, periodic and zero crossing signal)

Range	Range (Hz)	Resolution	Sensitivity	Accuracy
40.00A 400A-2000A	0.0 – 400.0Hz	0.1Hz	1A 10A	±0.5%±2dgts
40.00A 400A-2000A	0.400K – 3.000KHz 0.400K – 4.000KHz	1Hz	1A 10A	
40.00A 400A-2000A	3.00K – 40.00KHz 4.00K – 30.00K/10KHz ¹	10Hz	1A 10A	

¹ When the current is >400A and <2000A, only 10.00KHz can be measured.

In-Rush Current (ACA only, starting from 0A, Integration Time 100mS)

Range	Min. triggerable current (Threshold)
40A	2.00A
400A	20.0A
2000A	200A

Low input impedance of DCV (Loz DCV, Manual range, Input impedance: 200KΩ)

Range (V)	Resolution	Accuracy	Overload Protection
0.0 - 400.0	0.1V	±1.0%±2dgts	AC 1000V

Low input impedance of ACV

(Loz ACV, Manual range, true RMS, Crest Factor ≤3, Input impedance: 200KΩ)

Range (V)	Resolution	Accuracy (50/60Hz)	Accuracy (40 - 1KHz)	Overload Protection
0.0 - 400.0	0.1V	±1.0%±2dgts	±1.0%±3dgts	AC 1000V

DC Voltage (auto-range, Input Impedance 10MΩ)

Range (V)	Resolution	Accuracy	Overload Protection
0.000 - 4.000	0.001V	±0.5%±2dgts	DC 1000V
4.00 - 40.00	0.01V		
40.0 - 400.0	0.1V		
400 - 1000	1V		

AC Voltage (auto-range, true RMS, Crest Factor ≤ 3 , Input Impedance 10 M Ω)

Range (V)	Resolution	Accuracy (50/60Hz)	Accuracy (40 -1KHz)	Overload Protection
0.000 - 4.000 ¹	0.001V	$\pm 0.5\% \pm 2\text{dgts}$	$\pm 0.8\% \pm 5\text{dgts}$	AC 1000V
4.00 - 40.00	0.01V			
40.0 - 400.0	0.1V			
400 - 1000	1V			

¹ When measuring below AC 0.010V (40~400Hz), please press LPF button to filter the noise interference.

Continuity (Ω)

Range (Ω)	Resolution (Ω)	Accuracy	Beeping
0.0 - 400.0	0.1	$\pm 0.8\% \pm 2\text{dgts}$	< 30 Ω


Diode

Range (V)	Resolution (V)	Accuracy	Overload Protection
0 - 0.330V	0.001V	$\pm 100\text{dgts}$	AC 600V
0.330 - 2.000V		$\pm 2\% \pm 5\text{dgts}$	

Resistance (Ω) (auto-range, open voltage 0.5V)

Range (Ω)	Resolution (Ω)	Accuracy	Overload Protection
0.00 - 40.00 ¹	0.01	$\pm 0.8\% \pm 5\text{dgts}$	AC 600V
40.0 - 400.0	0.1		
400 - 4000	1		
4.00K - 40.00K	0.01K		
40.0K - 400.0K	0.1K		
400K - 4000K	1K		
4.00M - 40.00M	0.01M		

¹ When the resistance to be tested is < 20 Ω at 40.00 Ω range, to obtain listed accuracy, users must short the


test leads and zero the value before measurement. However, when the  button is pressed, the meter will be locked at 40.00 Ω range, and the resistance value greater than 40 Ω will be displayed as **OL**.

AC Low Pass Filter (LPF, Cut-off frequency (-3dB): 1 KHz (approx.))

Range	Resolution	Accuracy (of reading, 50/60Hz)
0 - 400.0A	0.1A	3% $\pm 5\text{dgts}$
400 - 1000A	1A	3.5% $\pm 5\text{dgts}$
1000 - 2000A	1A	4% $\pm 5\text{dgts}$

Capacitance (Auto-range, thin film capacitor or better is used)

Range (F)	Resolution (F)	Accuracy	Overload Protection
0.000n - 4.000n ¹	0.001n	±1.5%±3dgts	AC 600V
4.00n - 40.00n	0.01n	±0.8%±3dgts	
40.0n - 400.0n	0.1n		
0.400u - 4.000u	0.001u		
4.00u - 40.00u	0.01u		
40.0u - 400.0u	0.1u		
0.400m - 4.000m	0.001m		
4.00m - 40.00m ²	0.01m		

¹ At 4nF range, to obtain the listed accuracy it is necessary to ZERO first (by pressing ZERO  button once or several times until the reading becomes zero) to eliminate the capacitance effect produced by the wire of the test leads.

² Maximum measuring time of 40mF would take around 13 seconds. The smaller the capacitance value, the shorter the time.

Temperature^{1,2} (Auto-range, accuracy is % of reading ± °C or °F, K-Type thermocouples)

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

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

² Assume the clamp meter interior and the ambient temperature have reached equilibrium state (Both temperatures are the same).

Non-Contact Voltage (NCV) Detection

Range	Frequency
80 to 600V (one segment of bar “-” to four segments of bars “- - - -”)	50 / 60Hz

Audible beep tones proportional to field strength.

Detection antenna: inside the stationary jaw.

Auto-power-off : 15 minutes (LCD displays a  symbol)

General Specifications: Indoor Use

- Conductor Size:** 2.17" / 55mm (approx.)
- Battery Type:** 9V Battery
- Display:** 3 3/4 LCD with 40 seg. bargraph
- Range Selection:** Auto and Manual
- Overload Indication:** OL
- Power Consumption:** without backlight 17mA (Approx.)
- Low battery Indication:** Battery symbol flashes
- Sampling Time:** 3 times/sec. (display)
30 times/sec. (bargraph)
- Operating Temperature:** -10°C to 50°C
- Operating Humidity:** less than 85% relative
- Storage Temperature:** -20°C to 60°C
- Storage Humidity:** less than 75% relative
- Altitude:** up to 2000M
- Dimension:** 271mm (L) x 112mm (W) x 46mm (H)
10.7" (L) x 4.4" (W) x 1.8" (H)
- Weight:** 675g (battery included)
- Accessories:** Test leads x 1 set
Carrying bag x 1
Users manual x 1
9V Battery x 1
K-type thermocouples x 1
Adapter (for K-type thermocouples) x 1

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