

DC High Voltage Probe To DMM

高壓測試棒(數字電錶專用型)

HVP-50



INSTRUCTION MANUAL

使用說明書

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DC High Voltage Probe To DMM

1. SPECIFICATIONS

Ratio	1000 : 1 (1 KV = DMM 1 V Reading Value)
Input Impedance	500M Ω \pm 2%
Temperature Coefficient	\leq 100 ppm / $^{\circ}$ C
Max. Input Voltage	DC: 0 ~ 50 KV AC: 0 ~ 35 KV (50 / 60 Hz)
Accuracy	DC: \pm 1% to 40 KV \pm 2% to 50 KV AC: \pm 2% to 28 KV \pm 3% to 35 KV (50 / 60 Hz only)
Max. Loading Current	0.1 mA at 50 KV DC
Max. Loading Power	5 Watt
Ground Load Length	90 cm (3 ft)
Output Cable Length	100 cm (3.3 ft)
Dimensions / Weight	340 mm x 80 \varnothing About 260 g
Operating Temperature	0 $^{\circ}$ C ~ + 50 $^{\circ}$ C
Storage Temperature	-20 $^{\circ}$ C ~ + 70 $^{\circ}$ C

2. SAFETY PRECAUTIONS

This high voltage probe must only be used by the person who are trained, experienced (electronics technician), or otherwise qualified to recognize hazardous situations and who trained in the safety precautions that necessary to avoid possible injury when using such a device.

Do not work alone when working with high voltage circuits.


For your own safety, inspect the probes for cracks and frayed or broken leads before each use. If defects are noted, **DO NOT USE** the probe.

Hands, shoes, floor and work bench must be dry. Avoid making measurements under humid, damp or other environmental conditions that might affect the safety of the measurement situation.

If possible, always turn the high voltage source off before connection or disconnection the probe.

The probe body should be kept clean and free of any conductive contamination.

3. OPERATION

- (1) Please connect ground lead and cables probably before the measurements.
- (2) Connect banana leads to DMM input.
- (3) Set DMM to selected range (please use fixed 10M ohm input impedance DMM).
- (4)  Caution!
Please do not turn on high voltage source before completed above procedures.
- (5) Turn on DMM and connect to the testing point probably, and turn on high voltage source.

4. WARNING

Do not attempt to take measurements from sources when the chassis or return lead is not ground.

This ground connection is critical to the safety operation of the probe. Failure to make this connection may result in personal injury or damage to the probe or voltmeter. This connection must be made before the probe tip comes into contact with the high voltage and must not be removed until after the probe tip has been removed.

Do not connect the ground clip to the high voltage source or the probe tip to the ground for any reason.

BEFORE turning the high voltage on, make sure that no part of your body is in contact with the device.

Remembering that the voltage being measured is 1000 times greater than the voltmeter reading.

- (1) Please connect ground lead and cables probably and doing the measurements.
- (2) Please put probe on the isolated table when doing the measurements.
- (3) Please do not touch probe and cables when doing the measurements.

5. CLEANING

Clean only the exterior probe body and cables. Use a soft cotton cloth lightly moistened with a mild solution of detergent and water. Do not allow any portion of the probe to submerged at any time.

Dry the probe thoroughly before attempting to make voltage measurement.

Do not subject the probe to solvents or solvent fumes as these can case deterioration of the probe body and cables.

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高壓測試棒(數字電錶專用型)

1. 規格


轉接比例	1000 : 1 (1 KV 等於數字電表 1 V 讀值)
輸入阻抗	500 MΩ ± 2%
溫度係數	≤ 100 ppm / °C
最大輸入 電壓	直流: 0 ~ 50 KV 交流: 0 ~ 35 KV (限 50 / 60 Hz)
準確度	直流: ± 1% to 40 KV ± 2% to 50 KV 交流: ± 2% to 28 KV ± 3% to 35 KV (限 50 / 60 Hz)
最大負載 電流	0.1 mA 在 50 KV DC
最大消耗 功率	5 瓦特
接地線長度	90 公分 (3 英尺)
輸出電纜 長度	100 公分 (3.3 英尺)
尺寸/重量	340 公厘 x 80 Ø, 約 260 公克
操作溫度 範圍	0 °C ~ + 50 °C
儲存溫度 範圍	-20 °C ~ + 70 °C

2. 安全使用說明

本高壓測試棒僅供已經訓練過並有經驗的人員或合格的工程師使用。

- (1) 在操作高壓測試時請勿單獨一人作業。
- (2) 在使用前請先檢查測試棒是否有損壞，或者纜線是否有破損等。
- (3) 在工作時雙手以及鞋子、地板等須保持乾燥，以免發生觸電危險。
- (4) 在連接完成以前，請先將高壓電源關閉；欲停止使用前，亦請先關閉電源。
- (5) 請保持高壓棒本體乾淨，以免發生感應電流，產生觸電危險。

3. 操作方法

- (1) 先將接地線連接在良好的接地點上。
- (2) 將香蕉插頭連接在數字電錶的電壓輸入孔。
- (3) 設定數字電錶所需要的檔位(請勿使用自動換檔電錶)。
- (4)  注意!
在上述連接完成前，請勿開啟高壓電源。
- (5) 開啟數字電錶，連接預測試的點，並開啟高壓電源。

4. 注意事項

- (1) 在接地線未接好前, 請勿進行量測動作。
- (2) 不論在任何情況下, 皆不得將接地線連到高壓電源, 或將測試棒尖端接地。
- (3) 在打開高壓電源之前, 請先確認身體的任何部位皆未接觸到此高壓部位。
- (4) 在移除接地之前, 請確認測試棒之尖端已經遠離高壓電源。

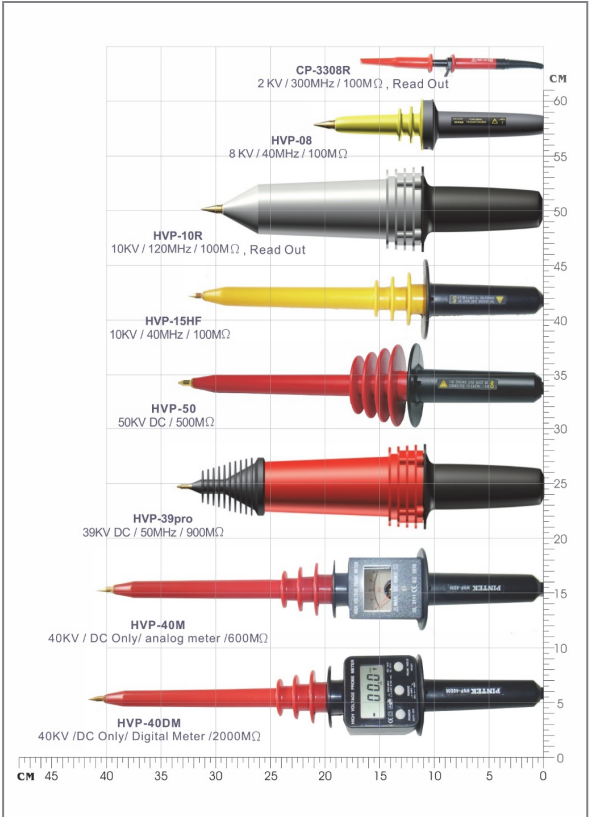
5. 清潔保養

- (1) 清潔高壓棒本體時, 請用柔軟的濕布擦拭, 請勿將高壓棒浸入水中。
- (2) 在量測前請確實擦乾高壓棒。
- (3) 請勿用任何有機溶劑擦拭清理高壓棒。

6. 附圖:

高壓測試棒尺寸比照圖

High Voltage Probe Dimension Comparison Fig.



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