




## DIFFERENTIAL PROBE P9000

Recorders 



# Delivering Greater Flexibility to Waveform Recording

Easily Connect to Hioki Memory HiCorders and HiLoggers for High Voltage Testing

- 1/2 the size and weight of legacy differential probe Model 9322
- 1000V AC/DC (CAT III 1000V / CAT IV 600V) 1000:1, 100:1
- Wide operating temperature range of -40°C to 80°C
- 3-way power supply (AC adapter, USB, external DC power supply)



Legacy product

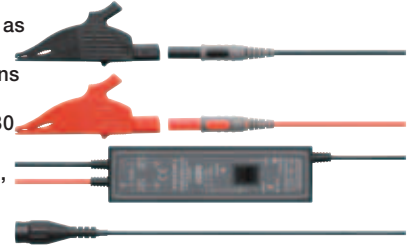
New product

# 1/2 the size of legacy model Easily use with 3-way power supply

- The AC adapter was too large...
- The setup was a bit much just to measure 200 V AC...

- CATIII 1000V measurement with a compact probe
- Use WAVE mode to observe instantaneous waveforms
- Use AC-RMS mode to observe RMS waveforms
- Principal applications...

1. High-voltage battery circuits in vehicles such as EVs and HEVs
2. High-voltage circuits in solar power installations and other alternative energy systems
3. Commercial power circuits, for example 480 Vrms circuits
4. High-voltage surge noise from inverters, motors, and solenoids, etc.



## Basic specifications (Accuracy guaranteed for 1 year)

	P9000-01	P9000-02
Measurement functions	WAVE mode only: waveform monitor output	(selectable) WAVE mode: waveform monitor output, AC-RMS mode: RMS value of the output AC waveform
Frequency characteristics	DC to 100 kHz -3 dB	WAVE mode: DC to 100 kHz -3 dB AC-RMS mode: 30 Hz to 10 kHz, Response time: rising 300 ms, falling 600 ms
Output accuracy	DC output: $\pm 0.5\%$ f.s. (f.s. = 1.0 V at 1000:1), (f.s. = 3.5 V at 100:1)	DC output: $\pm 0.5\%$ f.s. (f.s. = 1.0 V at 1000:1), (f.s. = 3.5 V at 100:1) Effective value: $\pm 1\%$ f.s. (30 Hz to 1 kHz, sine wave), $\pm 3\%$ f.s. (1 kHz to 10 kHz, sine wave)
Voltage division ratio	1000 : 1, 100 : 1 (selectable)	
Input resistance / capacitance	Between H and L: 10.5 M $\Omega$ , 5 pF or less (at 100 kHz)	
Max. allowable input	1000 V AC, DC	
Max. rated voltage to earth	1000 V AC, DC (CAT III)	
Operating temperature and humidity range	Temperature: -40 °C (-40 °F) to 80 °C (176 °F) Humidity: -40 to less than 40°C: 80% rh or less (no condensation) 40°C to less than 45°C: 60% rh or less (no condensation), 45°C to 80°C: 50% rh or less (no condensation)	
Power supply	(1) AC Adapter Z1008 (100 to 240 VAC, 50/60 Hz), 6 VA (including AC adapter), 0.9 VA (probe only), (2) USB bus power (5 VDC, USB Micro B receptacle), 0.8 VA, (3) External power: 2.7 V to 15 VDC, 1 VA	
Dimensions and mass	128 mm (5.04 in)W $\times$ 36 mm (1.42 in)H $\times$ 22 mm (0.87 in)D, 170 g (6.0 oz)	
Cord length	Input side: 70 cm (2.30 ft), Output side: 1.5 m (4.92 ft)	
Accessories	Instruction manual $\times$ 1, Alligator clips $\times$ 2, Carrying case $\times$ 1	

- WAVE mode: Record actual waveforms using DC coupling, AC-RMS mode: RMS value of the output AC waveform
- A Female BNC/Wire Conversion Cable (special-order) option is available for connecting the probe to a data logger's terminal block. Power can also be supplied from a Memory HiCorder's logic terminal.
- Use a commercially available USB cable to power the probe from a USB bus [USB (A type male) to USB (Micro B type male)]
- Hioki can also provide a three-branch cable that splits power from an AC adapter or USB cable on a special-order basis. Please contact your Hioki distributor for more information.

**Order Code: P9000-01** (Wave mode only, input up to 1 kV AC/DC)  
**P9000-02** (Select between WAVE/RMS mode, input up to 1 kV AC/DC)

*Note: This product is used by connecting it to the analog inputs on a Memory HiCorder. It requires an AC adapter, USB bus power, or other power supply to operate.*

**Power supplies**

**AC ADAPTER Z1008**  
100 to 240 V AC

Please contact your local HIOKI distributor

**USB Bus Power Cable**  
Supplies power from a USB Standard Type A receptacle

**USB A/Micro-B Cable**  
Supplies power from a USB Standard Type A receptacle via a USB Micro-B plug

**Three-branch Cable**  
Splits AC adapter output into three separate plugs

**Female BNC/Wire Conversion Cable**  
Splits a male BNC terminal into bare wires for connection to a screw terminal block

**Input cable options**

Test Pin Set L4932 is required when using the Small Alligator Clip Set L4934.

**EXTENSION CABLE SET L4931**  
Expands the length of the cable with banana plug, 1.5 m (4.92 ft) length

**TEST PIN SET L4932**  
Attaches to the tip of the banana plug cable, CAT IV 600V, CAT III 1000V

**SMALL ALLIGATOR CLIP SET L4934**  
Attaches to the tip of the L4932, L9207-10/DT4911, L9206, CAT III 300V, CAT II 600V

**ALLIGATOR CLIP SET L4935**  
Attaches to the tip of the banana plug cable, CAT IV 600V, CAT III 1000V

**BUS BAR CLIP SET L4936**  
Attaches to the tip of the banana plug cable, CAT III 600V

**MAGNETIC ADAPTER SET L4937**  
Attaches to the tip of the banana plug cable, CAT III 1000V

**TEST PIN SET L4938**  
Attaches to the tip of the banana plug cable, CAT III 600V

**BREAKER PIN SET L4939**  
Attaches to the tip of the banana plug cable, CAT III 600V

**GRABBER CLIP 9243**  
Attaches to the tip of the banana plug cable, CAT III 1000 V, 196 mm (7.72 in) length

*Note: Company names and Product names appearing in this catalog are trademarks or registered trademarks of various companies.*

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