

**Technical Data Sheet** 

# **Differential Probe for High Voltage Power Measurement- Model 4241**

The 4241 meets IEC61010-031 Category I Requirements and is ideally suited for measuring high-speed voltage surge in power electronics circuits.

#### Features

-Safety Certified-Over range Indicator -Up to +/-7000 V(DC +Peak AC) Differential -Bandwidth up to 70 MHz

### Applications

-High Voltage Floating Measurements-Voltage Surge Measurement-Power Electronics System Design-Electronic Ballast Design

#### Included

-Red & Black Sprung Hooks -Calibration Certificate -4ea AA Batteries -9 VDC Adapter





## **Model 4241 Specifications**

Bandwidth	DC to 70MHz (-3dB)
Attenuation	1:100/1000
Input Impedance	10 M OHm/10pF each side to ground
Accuracy	+/- 2%
Rise Time	<5ns
Input Voltage-Category	CAT I
-Differential Input Voltage	700Vrms and +/-700V (DC+Peak AC ) @ 1/100 5000Vrms and +/- 7000V (DC +Peak AC) @ 1/1000
-Common Mode Voltage	2500Vrms and+/-7000V (DC+ Peak AC) @ 1/100 & 1/1000
-Absolute Max . Input	2500Vrms and +/-7000V (DC+ Peak AC) @ 1/100 & 1/1000 in Commom Mode 5000Vrms and +/-7000V (DC +Peak AC) @ 1/100 & 1/1000 in Differential Mode
Output Voltage	
-Swing -Offset (typical) -Noise (typical) -Source Impedance (typical)	+ 7V (into 50kohm load) <+5mV 0.9m Vrms 50 Ohm (for using 1 Mohm input system oscilloscope)
CMRR (typical)	-80dB @ 50Hz, -60dB @ 20kHZ
Ambient Operating temp	-10 to 40 degree centigrade
Ambient Storage temperature	-30 to 70 degree centigrade
Ambient Operating humidity	Up to 85% RH
Ambient Storage humidity	Up to 85% RH
Power Requirements*	Standard- 4 x AA cells or 9VDC adapter (Both Included) Options- Power Leads
Length of Input Leads	23"
Length of BNC Cables	36"
Weight	0.9 lb
Dimensions	(LxWxH) 8" x 3 1/4" x 1 1/2

\* a. The supplied voltage must be less than 12V and greater than 4.4V, otherwise the probe could be damaged and will not operate properly.

b. polarity is "+" inside and "¡V" outside. For wrong polarity, built-in circuit protects the probe, no danger or damage will occur.

c. When the voltage of the cells become too low, the power indicator on the panel will flicker.

d. The adjustment screw on the front panel of the unit is the output offset adjustment. The output offset adjustment is to adjust the output voltage to zero before measuring.

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