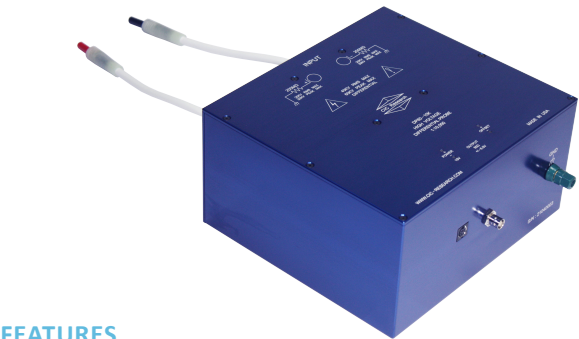


HIGH-VOLTAGE DIFFERENTIAL PROBES

DP60 SERIES



FEATURES

The DP60 series probes deliver high-accuracy performance that exceeds that of conventional high-voltage differential probes. They offer low offset voltage, low temperature drift, and stable operation in demanding test environments.

The high-performance power supply improves stability and reduces probe output noise. LVC models offer higher accuracy by using low-voltage, low-temperature-coefficient internal components. All probe models feature a 50 Ω output impedance, enabling reliable driving of long coaxial cables and making them well-suited for remote or restricted test environments outside the central laboratory.

HIGHLIGHTS & FEATURES

- Low Input Capacitance
- 75 MHz Bandwidth
- Up To 40 kV RMS, 60 kV Peak
- Two Standard and Two Precision Models with up to 0.1% DC Accuracy
- Excellent Performance when Measuring High CM Slew Rate Signals
- Digital Offset Adjustment
- Low Noise

APPLICATIONS

The DP60 series probes can be used for HV power supply design, power generation, UPSs, electromagnetic systems, high-energy research, fusion research, transmission power lines, and surge testing, among other applications.

The DP60 can be mounted inside systems, allowing users to replace lower-performance voltage-measuring modules.

Custom versions are available upon request.

GENERAL SPECIFICATIONS AND CHARACTERISTICS

INPUT	DP60-10K	DP60-10K-LVC
Input Voltage CM RMS Max	20 kV	
Input Voltage CM Peak Max	30 kV	
Input Voltage CM Peak Max*	30 kV	
Input Voltage DM RMS Max	40 kV	
Input Voltage DM Peak	60 kV	
Input Voltage DM Peak Max*	60 kV	
Bandwidth	70 MHz	
Division Ratio	1:10,000	
Input impedance	200 MΩ 2 pF each input to GND	
OUTPUT		
Output Voltage DC, RMS	±6.00 V	
Output Voltage Peak	±7.00 V	
Output Impedance	50 Ω (50 Ω termination is required)	
Rise Time	<4.7 ns	
Offset	±580 μV digitally adjustable (~36 μV/step) using the up (+) and down (-) momentary offset switches	
Accuracy	1.0%	0.1%
Noise	70 μVrms	
Common Mode Rejection		
100Hz	-120 dB	-130 dB
100KHz	-100 dB	-110 dB
10MHz	-90 dB	-100 dB
MECHANICAL		
Case Cover	Aluminum	
Dimensions (L x W x D)	8.666" X 9.488" X 4.847" (220.12 mm X 241.00 mm X 123.12 mm)	
Unit Weight	14.33 lb (6.50 kg)	
Cooling System	Convection	
Input Connector	4 mm safety plugs	
Output Connector	50Ω BNC	
Power	±15.20 V @ 150 mA	
ENVIRONMENT		
Operating Temperature	-40° C to +85° C	
Storage Temperature	-55° C to +100° C	

Notes

1) At 25°C ambient temperature horizontal mounting orientation.

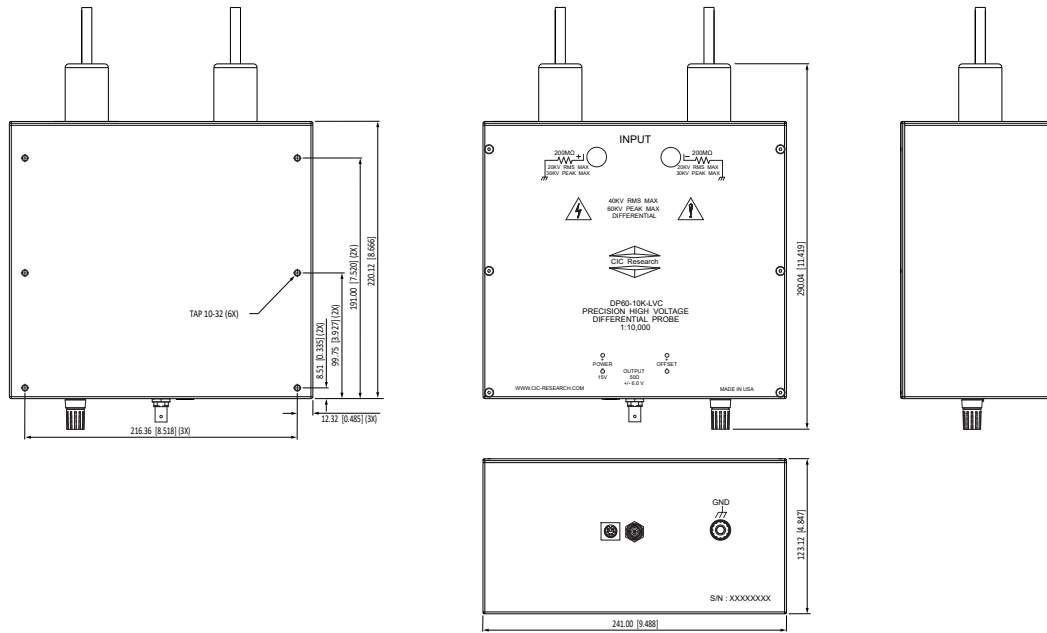
2) All parameters are typical specified at 25°C ambient temperature unless otherwise indicated.

3) Information and specifications contained within this publication may change without notice.

4) Non-Measurable. Peak voltages can be applied for <5 s.

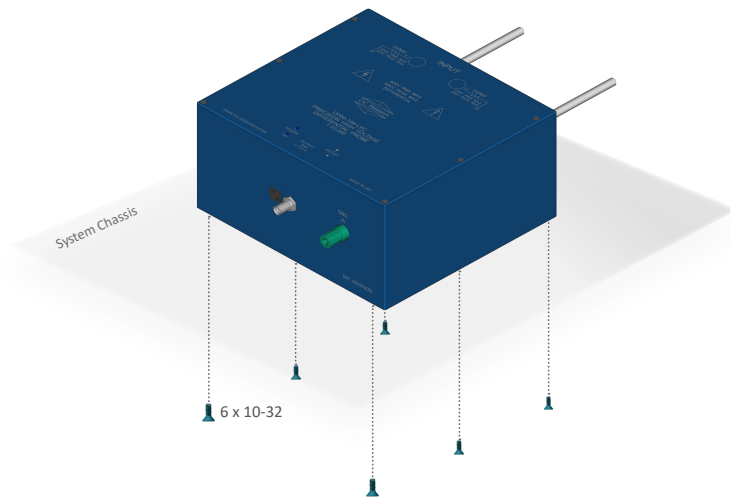
5) CM stands for Common Mode and DM for Differential Mode.

MECHANICAL DRAWINGS



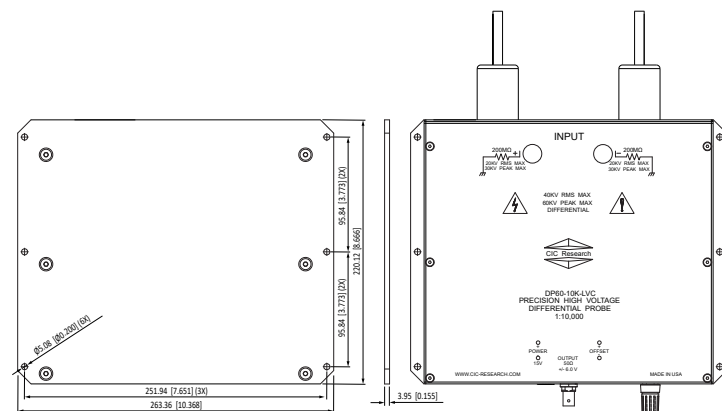
SYSTEM MOUNTING

DIRECT MOUNTING

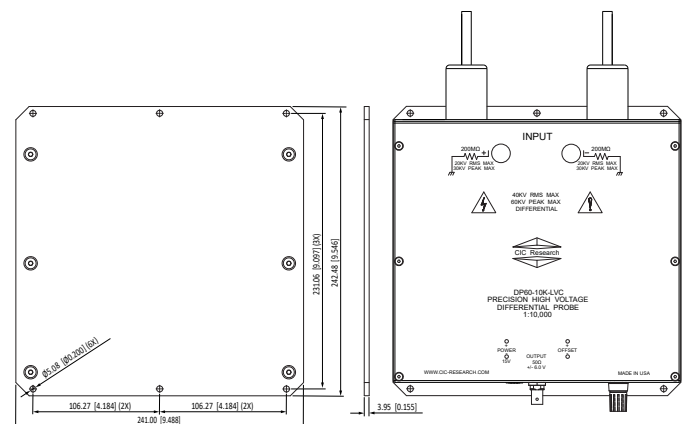


DP60 series probes can be mounted directly on a base plate or enclosure walls with 6 x 10-32 screws.

MOUNTING FLANGE TYPE A



MOUNTING FLANGE TYPE B



Note: Units are - mm [in]