



DP02 SERIES HIGH VOLTAGE DIFFERENTIAL PROBES

Extremely Low Input Capacitance 0.2pF Typical

100MHz Bandwidth

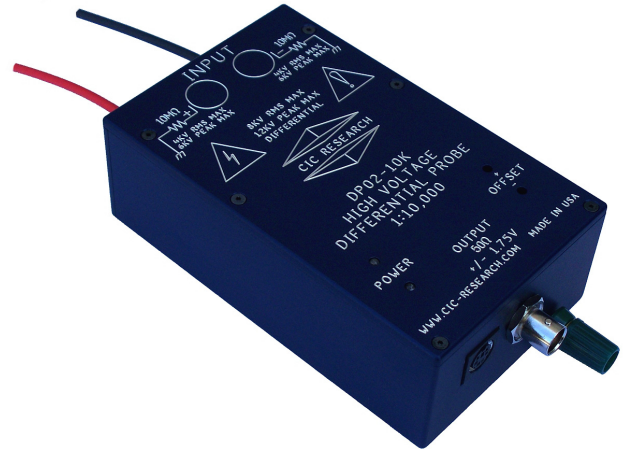
Up To 8000V RMS, 12KV Peak

Two Precision Models, 0.1% DC Accuracy

Unmatched Performance with High Common Mode Slew Rates

Digital Offset Adjustment

Low Noise



FEATURES

The DP02 series probes introduce a new and innovative technology that allows a significant decrease in the input capacitance. This and other proprietary technology improves the performance of the probe by a factor of ten compared to others when used with high common mode slew rate input signals.

These probes are accurate, and have a very low offset. A specially designed instrumentation power supply has been used to increase the stability and minimize the noise.

LVC models offer low voltage coefficients, low temperature coefficients, and high accuracy.

All probes have 50Ω outputs that allow the use of a long 50Ω coaxial cable extension away from the unit under test, for example off-limits test areas, which are outside of the main laboratory.

APPLICATIONS

Our probes excel in power conversion system testing. Their low input capacitance gives higher input impedance at high frequencies. DP02 series has a high resonant input frequency typically between 150 – 250MHz, making them prime candidate for applications requiring good accuracy at high frequency.

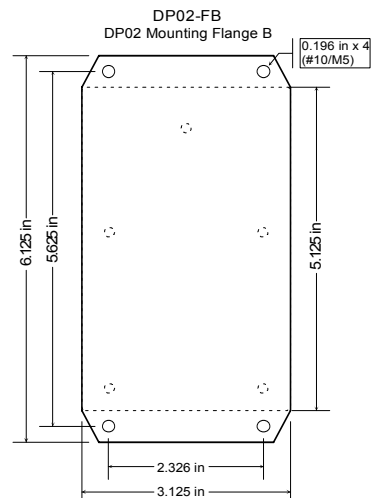
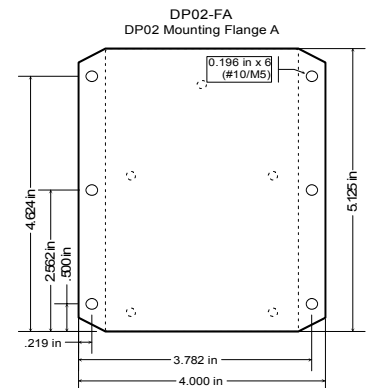
DP02 probes can be used in automotive industry, especially on R&D on electrical vehicles.

Megawatt traction inverters, power supply design, power generation, UPS, Electro-magnetic systems, high energy research, fusion research, surge testing, are only a few areas that can make use of the high performance DP02 probe family.

Custom versions are available on request.

DP02 series is replacing the DP01 series. It is more compact with a smaller footprint and lower weight. DP02 can be mounted inside systems allowing users to replace lower performance voltage measuring modules.

Other possible use is to monitor in-system power switching devices in order to predict and prevent their failures in ultra-reliable equipment.



DP02 SERIES HIGH VOLTAGE DIFFERENTIAL PROBES

Specifications and Characteristics

	DP02-1K	DP02-1K-LVC	DP02-10K	DP02-10K-LVC
Input Voltage Common Mode RMS	±1000 V	±1000 V	±4000 V	±3150 V
Input Voltage Common Mode Peak	±1500 V	±1500 V	±6000 V	±6000 V
Input Voltage Common Mode Peak Maximum	±6000 V	±6000 V	±6000 V	±6000 V
Input Voltage Differential Mode RMS	±1750 V	±1750 V	±8000 V	±6300V
Input Voltage Differential Mode Peak	±2000 V	±2000 V	±12000 V	±12000 V
Input Voltage Differential Mode Peak Maximum	±12000 V	±12000 V	±12000 V	±12000 V
Bandwidth	100 MHz	100 MHz	100 MHz	100 MHz
Division Ratio	1:1000	1:1000	1:10000	1:10000
Accuracy	1%	0.1%	1%	0.1%
Input impedance	1 MΩ (DC – 100 KHz)	1 MΩ (DC – 100 KHz)	10 MΩ (DC – 10 KHz)	10 MΩ (DC – 10 KHz)
Risetime	3 ns	3 ns	3 ns	3 ns
Output Voltage	±1.75 V	±1.75 V	±1.75 V	±1.75 V
Output Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Offset	±600 μV digitally adjustable to ±20 μV	±600 μV digitally adjustable to ±20 μV	±600 μV digitally adjustable to ±20 μV	±600 μV digitally adjustable to ±20 μV
Noise	10 μVrms	10 μVrms	10 μVrms	10 μVrms
Common Mode Rejection				
100Hz	-100 db	-100 db	-105 db	-110 db
100KHz	-90 db	-100 db	-105 db	-110 db
10MHz	-85 db	-90 db	-95 db	-95 db
Operating Temperature	-40° C - +85° C	-40° C - +85° C	-40° C - +85° C	-40° C - +85° C
Power	±5.1 V @ 100 mA	±5.1 V @ 100 mA	±5.1 V @ 100 mA	±5.1 V @ 100 mA
Input Leads	4 mm safety plugs	4 mm safety plugs	4 mm safety plugs	4 mm safety plugs
Output Cable	50Ω RG58 BNC-BNC	50Ω RG223 BNC-BNC	50Ω RG58 BNC-BNC	50Ω RG223 BNC-BNC
Weight	1.27 lb (575g)	1.27 lb (575g)	1.27 lb (575g)	1.27 lb (575g)
Dimensions	5.125" X 3.125" X 1.675" (130 mm X 79 mm X 43 mm)	5.125" X 3.125" X 1.675" (130 mm X 79 mm X 43 mm)	5.125" X 3.125" X 1.675" (130 mm X 79 mm X 43 mm)	5.125" X 3.125" X 1.675" (130 mm X 79 mm X 43 mm)

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