

# HIGH VOLTAGE DIFFERENTIAL PROBE

## DP-50K ( 50 KVp-p / 75MHz )

### SPECIFICATIONS:

**(1) Bandwidth:**

DC - to 75 MHz (-3 dB) for X500  
DC - to 20 MHz (for attenuation X5000)

**(2) Attenuation:** x 500, or X5000

**(3) Accuracy:**  $\pm 2\%$

**(4) Voltage Input Ranges (DC+AC peak to peak):**

$\leq \pm 25$  KV DC for X5000, (i.e about 17 KV RMS or 25 KV DC)  
 $\leq \pm 2.5$  KV DC for X500, (i.e about 1.7 KV RMS or 2.5 KV DC)

**(5) Permitted Max Input Voltage**

Max differential voltage: 50 KVp-p (DC+AC peak to peak)  
Max voltage between each input terminal and ground: 8.8 KV RMS

**(6) Input Impedance:**

Differential: 140 M $\Omega$  // 3 pF  
Between terminals and ground: 280 M $\Omega$  // 1.5 pF

**(7) Output:**  $\leq \pm 5$  V

**(8) Output Impedance:** 50  $\Omega$

**(9) Rise Time:** 4.7 ns for X500; 17.5 ns for X5000

**(10) Rejection Rate on Common Mode:**

60 Hz:  $> 80$  dB , 100 Hz:  $> 60$  dB , 1 MHz:  $> 50$  dB

**(11) Power Supply:** External 9 V DC power supply.

**(12) Consumption:** 120 mA max (1.1 WATT)

### CAUTION!

- (1) Please DO NOT hold the probe itself when measuring the high voltage is over 1 KV. Please put the probe itself on the working table.
- (2) Please DO NOT measuring home electricity (including two-phase electricity and three-phase electricity). DO NOT measure over 10 KV RMS.
- (3) Please let the probe has 30 minutes rest after having a 5 minutes normal measurement for over DC 10 KV or AC 7 KV RMS.  
It is able to give time for internal high voltage resistors to cool down.