

# Sapphire Instruments Co., Ltd.

## Specifications of SI-50

### Specifications

Bandwidth	DC to 50MHz (-3dB)
Attenuation Ratio	1/10
Accuracy	±1%
Rise Time	<7ns
Input Impedance	1.6MΩ//7pF each side ground
Input Voltage	
- Differential Range	±70V(DC+Peak AC) or 70Vrms
- Common Mode Range	±700V(DC+Peak AC) or 600Vrms
- Absolute Max. Voltage (either input to ground)	±700V(DC+Peak AC) or 600Vrms CAT I
Output Voltage	
- Swing	±7V (into 5kΩ load)
- Offset (typical)	<±2mV
- Noise (typical)	0.7mVrms
- Source Impedance (typical)	50Ω (for using 1MΩ input system oscilloscope)
CMRR (typical)	-95dB @60Hz, -60dB @1MHZ
Power Requirements*	
- Options	Power leads , Mains adaptor*(6VDC/90mA or regulated 9VDC/70mA), USB power cord Removable battery pack (4xAA cells)
Optional Extension Plugs for Mains Adaptor	
- Input	One jack of 1A current rating.
- Output	Three plugs of 1A current rating.
Ambient Operating Temperature	-10 to 40
Ambient Storage Temperature	-30 to 70
Ambient Operating Humidity	25 to 85% RH
Ambient Storage Humidity	25 to 85% RH
Length of BNC Cable	125cm
Length of Input Leads	50cm
Weight	300gms
Dimensions (LxWxH)	111mm x 22mm x 14mm

\* a. The supplied voltage must be less than 16V and greater than 3.3V, otherwise the probe could be damaged or can't be operated properly.

- b. For wrong polarity of power sources, a built-in circuit will protect the probe and no danger or damage will occur.
- c. When the voltage of the cells become too low, the power indicator on the panel will dim and then distinguish.