

# Sapphire Instruments Co., Ltd.

## Specifications of SI-9002

### Specifications

Bandwidth	DC to 25MHz (-3dB)
Attenuation Ratio	1:20/200
Accuracy	±2%
Rise Time	14ns
Input Impedance	4MΩ//5.5pF each side to ground
Input Voltage	
- Differential Range	±140V(DC+Peak AC) or 140Vrms @1/20 ±1400V(DC+Peak AC) or 1000Vrms @1/200
- Common Mode Range	±1400V(DC+Peak AC) or 1000Vrms @1/20 & 1/200
- Absolute Max. Voltage (Differential or Common Mode)	±1400V(DC+Peak AC) or 1000Vrms CAT III @1/20 & 1/200
Output Voltage	
- Swing	±7V (into 50kΩ load)
- Offset (typical)	<±5mV
- Noise (typical)	0.7mVrms
- Source Impedance (typical)	50Ω (for using 1MΩ input system oscilloscope)
CMRR (typical)	-80dB @50Hz, -60dB @20kHz
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
Power Requirements*	
- Standard	4xAA cells
- Options	Power leads, Mains adaptor* (6VDC/60mA or regulated 9VDC/40mA), USB power cord
Length of BNC Cable	95cm
Length of Input Leads	45cm
Weight	400gms (probe and PVC jacket)
Dimensions (LxWxH)	170mm x 63mm x 21mm

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a. The supplied voltage must be less than 12V and greater than 4.4V, otherwise the probe could be damaged or can't be operated properly.  
b. polarity is "+" inside and "-" 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.