Differential Probe

■ N1008A

（50MHz,800V）

INSTRUCTION MANUAL

Maintenance

For maintenance,only use specified spare parts.The manufacturer can not be held responsible for any accident arising following a repair made other than its after sales service or approved repairs.

Cleaning

This probe does not require any particular cleaning.If necessary,clean the case with a cloth slightly moistened with the soapy water.

Warranty

Unless notified,our instruments are guaranteed against any manufacturing defect or material defect. They do not bear the specification known as the safety specification.

Our guarantee,which may not under any circumstances exceed the amount of the invoiced price,goes on further than the repair of our faulty equipment,carriage paid to our workshops.

Repair

Maintenance,repairs under or out of guarantee.Please return the product to the manufacturer.

N1008A Differential Probe

1.Features

The N1008A differential probe provides a safety means for measuring differential voltage to all models of oscilloscopes.It can convert the high differential voltage(≤ 800V) into a low voltage(≤ 8V)and display on the oscilloscope.Its bandwidth is up to 50MHz,which is ideal for big power testing,development and maintain.

The N1008A is designed to operate with the 1MΩ impedance oscilloscopes. When combine with the 50Ω load , the attenuation will be 2 times.

N1008A is recommend to use with our own manufactured PL-10N to expand the measuring with the electricity meter to observe more accurate measurement.The accuracy of oscilloscope is 1% and the DMM is less than 1%)

2.Specifications

(1) Bandwidth:DC-50MHz
(2) Attenuation: X100,X10
(3) Accuracy:+/-1%
(4) Input voltage range(DC+AC PEAK)
≤80V for x10,
≤800V for x100
(5) Permitted max input voltage:
Max differential voltage: 800V(DC+AC PEAK)

Max voltage between each input terminal and ground: 5KV RMS

（6）Input Impedance:

Differential: 8MΩ /2.5pF

Between terminal and ground:4MΩ /1.3pF

（7）Output voltage: ≤ 8V

（8）Output impedance: 50Ω

(9) Rise time: ≤7nS

(10)Rejection rate on common mode:

-80dB@60Hz,-50dB@100KHz

(11)Power Supply: 6V DC power supply.4*AA battery

(12)Consumption: 300mA max

3.Operating environmental conditions

	Reference	Use	Storage
Temperature	+20℃…+30℃	0℃….+50℃	-30℃….+70℃
Relative Humidity	≤70%RH	10%…85%RH	10%…90%RH

Dimensions and weight：84x38x186mm; 500g

4.Operating procedure

- Connect the probe to the oscilloscope with the insulated BNC/BNC lead.
- Adjust the vertical zero adjustment of the oscilloscope if necessary.
- Select the attenuation ratio* and the vertical deviation of the oscilloscope in accordance with the conversion table below.
- NB: The POWER light must come on.

Attenuation ratio	X100	X10
Voltage Input Range (DC+AC Peak)	800V	80V

[N.B]

The real vertical deviation in V/div is equal to the attenuation factor multiplied by the range of vertical deviation selected on the oscilloscope. It will be doubled in the case of use of a 50 Ω load.

1% Accuracy Differential Probe Buying Guide

Model	Bandwidth	Attenuation Ratio	Accuracy	Max. input differential voltage（DC+ ACpeak）
N1000A	40MHz	1:1000/100	1%	1400V@1/1000 140V@1/100
N1008A	50MHz	1:100/10	1%	800V@1/100 80V@1/10
N1008B	100MHz	1:100/10	1%	800V@1/100 80V@1/10
N1015A	100MHz	1:1000/100	1%	1500V@1/1000 150V@1/100
N1030A	50MHz	1:1000/100	1%	3000V@1/1000 300V@1/100
N1030B	100MHz	1:1000/100	1%	3000V@1/1000 300V@1/100
N1070A	50MHz	1:1000/100	1%	7000V@1/1000 700V@1/100
N1070Apro	50MHz	1:1000/100	0.5%(50Hz-1 KHz),1%	7000V@1/1000 700V@1/100
N1070B	100MHz	1:1000/100	1%	7000V@1/1000 700V@1/100