

# Coulomb meter (NK-1001A/NK-1002A)



This Coulomb meter is a probe-type device that permits easy measurement of the amount of electrostatic discharge (ESD), which causes electrostatic damage to electronic devices in their manufacturing, inspection and assembly. The charged device model (CDM) explains many cases of ESD that damage electronic devices. The CDM is a model of a phenomenon in which a high peak current flows at a high speed when the device itself is charged and its external electrode is grounded. The Coulomb meter performs high-precision measurement of the amount of ESD, which is the integral value of the current.

## Features

- The amount of electrostatic discharge is easily measured by having the Coulomb meter contact the object of measurement (conductor).
- Capable of measuring the amount of ESD on electronic devices or printed wiring boards surrounded by charged insulators, which is caused by induction charging.
- The measurement method is based on the actual phenomenon of electrostatic destruction (CDM).
- Since the unit contacts the object of measurement it is virtually free from errors caused by differences among measurers.
- Permits switching between two modes: peak hold measurement and continuous measurement.
- The optional conductive probe tip lets the unit be used safely for sensitive products.
- The optional AC adapter enables long and continuous usage of the meter in evaluations, experiments, etc.
- Use of the separately sold ZHO-200PN allows conversion of the device capacitance.
- Use of the separately sold KQ-1400 makes the unit capable of measuring the amount of electrostatic charge (using the Faraday cage method).

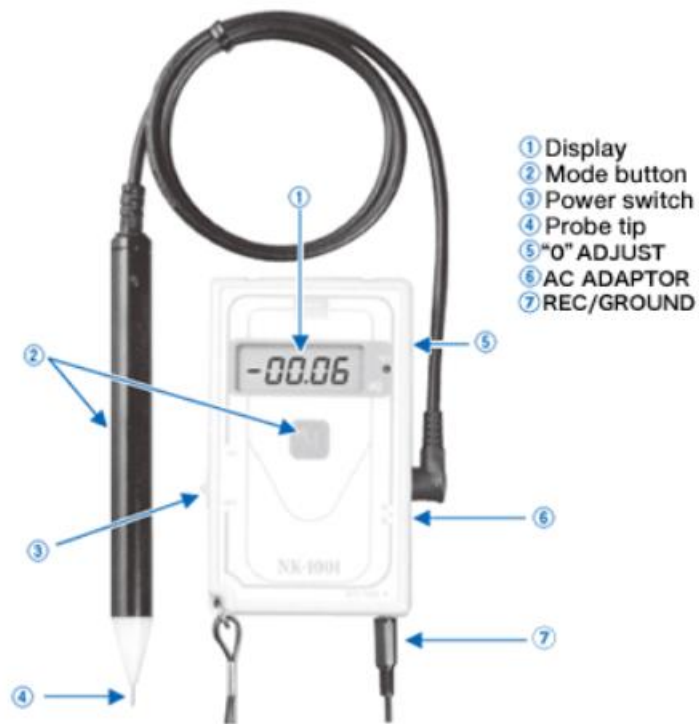
# Coulomb meter (NK-1001A/NK-1002A)

## Specifications

Model	NK-1001A	NK-1002A
Detection method	Capacitor charging	
Measuring ranges	$\pm 0.01 - \pm 99.99\text{nC}$	$\pm 1 - \pm 9999\text{nC}$
Analog output	0 - $\pm 999.9\text{mV}$	
Measurement precision	Within $\pm 5\% + 2$ counts	
Measurement mode	Continuous/ Peak hold	
Standard amount of electrostatic on capacitor in probe	0.1 $\mu\text{F}$	1 $\mu\text{F}$
Operating environment	Temperature: 0°C-40°C, Humidity: 65% RH or below (no condensation)	
Power supply	2 AA alkaline batteries (7 hours or more of continuous operation)	
Dimensions	Main unit: 121×70×22mm Probe: 167mm×15φ	
Mass	Approx. 230g(including probe and batteries)	
Options	NK-OP-2 / Conductive probe tip KSD-AC1 / AC power supply adapter (AC100-240V) KSD-REC / Analog output cable (length = 1,000 mm)	

# Coulomb meter (NK-1001A/NK-1002A)

## Names of parts



# Coulomb meter (NK-1001A/NK-1002A)

## Optional items

### DC power supply device for measurement of charge amount



This easy-to-handle DC power supply device calculates the capacitance by charging the object of measurement with an arbitrary level of voltage and undertaking measurement with a Coulomb meter.

It can also be used for all types of pseudo-charge.

\*The color of the main unit's enclosure has been changed from black to white.

<b>Model</b>	ZHO-201PN
<b>Variable range of output voltage</b>	$\pm 0.6 - \pm 1.1\text{kV}$
<b>Power supply</b>	2 AAA alkaline batteries
<b>Dimensions · Mass(main unit)</b>	117×70×24mm 140g
<b>Dimensions · Mass(probe)</b>	140mm×12φ 20g

# Coulomb meter (NK-1001A/NK-1002A)

## Faraday cage



Use of this Faraday cage with the Coulomb meter permits measurement of the amount of electrostatic charge using the Faraday cage method

<b>Model</b>	KQ-1400
<b>Dimensions of Faraday cup</b>	100mm×100φ
<b>External dimensions</b>	310×180×160mm
<b>Mass</b>	Approx. 4.2 kg