

# POTENTIOSTAT/GALVANOSTAT COMPACT



N600-HA151B



The N600-HA151B model is your low-cost and compact Potentiostat solution for fast and convenient field usage. This unit is capable of conducting experiments such as metal testing or metal corrosion monitoring. **This device is an optimal combination of stability and portability.** The over-current suppression circuit protects the system in case of accidental short-circuiting of the counter or working stations. The external control input and potential/current recording output terminals are built-in for immediate data results of the polarization curve when in the field.

## As a Potentiostat

(a) Max. Output voltage	$\pm 15V$
(b) Max. Output current	$\pm 1A$
(c) Current Means Range	$\pm 1A, \pm 100mA, \pm 10mA,$ $\pm 1mA, \pm 100\mu A, \pm 10\mu A, \pm 1\mu A$ $\pm 10\mu A, 6\text{-ranges}$
(d) Max. Control potential	$\pm 10V$
(e) Internal setting potential	$\pm 2V$
(f) Internal setting accuracy	0.5% (setting value) $\pm 3mV$
(g) External control accuracy	$< \pm 3mV$
(h) Response time	$< 50\mu sec$
(i) Reference input resistance	$> 10^{10} \Omega$
(j) Reference bias current	$< 10^{-10} A$
(k) Temperature coefficient	$30\mu V/^{\circ}C$

## As a Galvanostat

(a) Max. Output current	$\pm 1A$
(b) Max. Output voltage	$\pm 15V$
(c) Current setting range	$\pm 1A, \pm 100mA, \pm 10mA, \pm 1mA, \pm 100\mu A, \pm 10\mu A, \pm 1\mu A,$ $\pm 10\mu A, 6\text{-ranges}$
(d) Setting accuracy	$< \pm .01\%$
(e) Response time	$< 50\mu sec$

## As an Electrometer

(a) Input resistance	$> 10^{10} \Omega$
(b) Bias current	$< 10^{-10} A$
(c) Response time	$< 10\mu sec$
(d) Conversion accuracy	$< \pm 0.1\%$
(e) Potential range	10V, 2V

Connecting this model to a data logger via the analog port permits the storage of data. We recommend connecting the data logger to your PC via the digital port to retrieve the data and analyzing the results in Excel or your existing software.

## APPLICATIONS

- Coulometry
- Polarization
- Current
- Voltammetry

# POTENTIOSTAT/GALVANOSTAT

50V 

N600-HABF-501A

Model N600-HABF-501A is a **compact sized electrochemical measuring system** that incorporates a potentiostat/galvanostat, a function generator, and a coulomb meter. This exceptional unit is suitable for use in a wide range of experiments, including laboratory study, organic electrolysis, precision synthesizing, bio-sensing, plating, and corrosion analysis.

## As a Potentiostat/Galvanostat

Max Output voltage	$\pm 50V$
Max Ouput Current	1A
Set Voltage	
Range	$\pm 10V$
Resolution	1 mV
Control Accuracy	$\pm 0.03\% \text{ of FS}$
Input impedance	$10 G\Omega$
Range of Detected Potential	$\pm 10V$
Detected Potential Accuracy	$\pm 0.03\% \text{ of FS}$
Detected Current Range	1A
Pulse Mode	100mA
Set Current Range	$\pm 10mA, \pm 1mA, \pm 100\mu A,$ $\pm 10\mu A, \pm 1\mu A,$ $\pm 0.2\% \text{ of FS}$
Detected current accuracy	

## As a Coulomb Meter

Measuring range	1 $\mu C$ ~99999.99C
Maximum measuring speed	1000000 digit/s

## General Specifications

Physical Dimension	430mm x 103mm x 365mm (WxHxD)
Weight	8.1 kg
Power source	AC120V $\pm 10\%$ , 50/60Hz
Power consumption	3A or less
Insulation resistance	DC500V 100M or more
Withstanding	AC1500V 1 minute

## Environment

Operational temperature	0 $^{\circ}$ ~40 $^{\circ}C$
Operational humidity	10% RH~90% RH (without dew)
Storage temperature	-10 $^{\circ}C$ ~40 $^{\circ}C$
Storage humidity	5% RH~90% RH (without dew)
Accuracy guaranteeing temperature	23 $^{\circ}C$ $\pm 5^{\circ}C$

## FEATURES

- Measurement capability in 4 modes: electrometer mode, potentiostat mode, galvanostat mode and unresisted ammeter mode.
- Built-in function generator and coulomb meter.
- 2 current ranges (10  $\mu A$  range, & 1  $\mu A$  range are included).
- Improved coulomb integrate accuracy (10 digit/s  $\rightarrow$  1000000 digits/s).
- Possible control and data acquistion on N600-HABF501A from computer using USB port (Maximum 10 samples/sec).
- Power source: AC 120 V, 50-60 Hz

