

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

## As a Coulomb Meter

Measuring range	$1 \mu C \sim 99999.99C$
Maximum measuring speed	$1000000 \text{ digit/s}$

## General Specifications

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

## Environment

Operational temperature	$0^{\circ} \sim 40^{\circ}C$
Operational humidity	$10\% RH \sim 90\% RH$ (without dew)
Storage temperature	$-10^{\circ}C \sim 40^{\circ}C$
Storage humidity	$5\% RH \sim 90\% RH$ (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 ( $10 \text{ digit/s} \rightarrow 1000000 \text{ digits/s}$ )
- Possible control and data acquisition on N6000-HABF501A from computer using USB port (Maximum  $10 \text{ samples/sec}$ ).
- Power source:  $AC 120 V, 50-60 Hz$

