FUNCTION GENERATOR FOR ELECTROCHEMISTRY

N600-HB305

APPLICATIONS

- Voltammetry
- Polarization
- Vibration
- Resonance
- Coulometry
- Sound

FUNCTION GENERATOR PORTABLE

N600-HB111A

This model consists of a wave form suitable for electrochemistry setting function. It provides **high accuracy and high resolution potential settings**. When taking electrochemical measurements using this potentiostat/galvanostat, it is possible to vary the electric potential/current and set on a sample with a timer. In such cases, it becomes possible to restrict the current and electric potential of various waveforms by connecting the function generator to a potentiostat/galvanostat.

Specifications

Output Wave Form	Ramp wave form, CV (chopping wave), Square wave, DPV, NPV, Staircase, 99 step optional wave form
Range of Voltage Set	± 9999 mV
Minimum Set Value	± 1 mV
Voltage Set Range	± 10V, ± 2V, ± 1V, AUTO
Voltage Accuracy	± 0.05% ± 0.5mV of set value
Resolution	16 bit (1/32 mV at ± 1V range)
Scan Speed	0.1 mV/min ~ 9999 mV/sec
Step Holding time	0.01 ms ~ 999.99 min
Maximum Set Cycle	999 (repeats until STOP by 0 setting)
Power Requirement	AC120V, 60Hz
Physical Dimension	200mm x 145mm x 320mm (WxHxD)
Weight	4 kg

FEATURES

- Possible to set waveform peculiar in electrochemical measurements, such as CV, DPV, etc.
- Optional waveform (Max. 99 steps)
- Uses 16-bit high resolution DAC (1/32mV resolution at +/- 1mV)
- High setting accuracy (+/- 0.05% +/- 0.5mV of set value)
- Rich saving of sets (basic memory per each wave form + expanded memory of 8 wave forms)
- Possible to set from PC by USB connection
- External output of Start/Stop function

This model, when combined with a Potentiostst/Galvanostat, is **extremely powerful in voltammetry, coulometry, automatic polarization**, and other studies where external control is needed. Four waveforms can be obtained with simple operations. The ramp slope can be varied from 0.1mV/sec to 5000V/min (83.3V/sec). This wide range of variation enables close analysis of corrosion on the electrode surfaces, passivity, and electrode reactions.

Scanning Speed

(a) Setting 1	X10-1, X1, X10, $X10^2$, $X10^3$
(b) Setting 2	1, 2, 5
(c) Setting Units	mV/sec, 100 mV/min
(d) mV/sec	0.1, 0.2, 0.5, 1, 2, 5, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, $1x10^4$, $2x10^4$, $5x10^4$
(e) mV/min	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, $2x10^4$, $5x10^4$, 1x105, $2x10^5$, $5x10^4$, $1x10^6$, $2x10^6$, $5x10^6$
(f) Setting Accuracy	1% (for x1 ~ x10); 2% (for x10 and beyond)

Scanning Potentials

(a) Range	-5.000V ~ +5.000V
(b) Setting	Initial, Upper, and Lower Potentials can be set independently (INITIAL, HIGH, LOW)
(c) Setting Accuracy	1% (setting potential) ±20mV
Waveforms	Ramp One-shot triangle One-shot double triangle Repetitive triangles
Switches	START/STOP HOLD (Output potential drift < +/-0.001mV/sec) REVERSE
Indicator Lamps	STOP LED START LED HOLD LED UP LED DOWN LED
Power Requirements	AC120V +/- 10%, 50/60 Hz, Single Phase, 20VA
Physical Dimensions	227mm x 100mm x 295mm (WxHxD)
Weight	4 kg

FEATURES

- Affordable
- Lightweight
- Excellent Instructional Instrument
- Easily Connects to any Potentiostat
- Small Size
- Easy to Operate
- High Performance