

# POTENTIOSTAT/GALVANOSTAT

## 7 RANGES

### N600-HAL3001

### APPLICATIONS

- Corrosion Control
- Battery Testing
- Electrochemistry
- Coulometry
- Surface Imaging
- Fuel Cell Testing
- Voltammetry

# POWER BOOSTER

## FOR POTENTIOSTAT

### N600-HAL3001-B10



This new potentiostat/galvanostat model is **designed for demanding electrochemical applications**. It is ideal for fundamental electrochemical studies in areas as diverse as physical electrochemistry, corrosion measurement, voltammetry, coulometry, automatic polarization, and other studies. This unit provides a combination of blazing speed, a wide current range, low noise, high sensitivity, and **unsurpassed versatility**.

This power booster is specifically designed for the **Potentiostat N600-HAL3001 model to boost the maximum output current to 10 Amps from the initial 1 Amp capability**.

#### For Potentiostat

Max Output voltage	± 30V	
Max Output Current	± 10A	
Set Voltage (WE-RE)		
Range	± 2V	2V Range
	± 10V	10 V Range
Resolution	0.06mV	2V Range
	0.032mV	10V Range
Control Accuracy	± 0.2% full scale ± 1mV	
Rise Time	< 1ms	
Control Response	Slow Medium Conditions	
Select	(no load, response: MEDIUM)	

#### For Galvanostat

Max Output voltage	± 30V (CE-WE)
Max Output Current	± 10A
Set Voltage (WE-RE)	
Range	± 2A
Control Accuracy	0.3% full scale
Rise Time	< 1ms
Control Response	Slow Medium Conditions
Select	Conditions (load: Shunt resistance 10A/100mV, 10A range, response: Medium)

#### For Electrometer

Input Impedance	> 10 <sup>11</sup>
Reference electrode bias	< 5x10 <sup>-11</sup>
Latent current	
Max Input Voltage (WE-RE)	± 10V
Detected Voltage Range	± 10V, ± 2V, AUTO
Detected Voltage Accuracy	± 0.2% full scale ± 1 mV
Temperature Drift	10 μ °C

#### For Current Detection

Detected Current Range	10A, 1A, 100mA, 10mA, 1mA
Detected Current Accuracy	± 0.3% full scale of current range

#### As a Potentiostat

Detect Current Range	± 1A, ± 100mA, ± 10mA, ± 1mA, ± 100μA, ± 10μA, ± 1μA, AUTO
Internal Control Voltage	± 2V (2V range), ± 10V (10V range)
Max. Control Voltage	± 10V
External Set Accuracy	± 0.05% ± 1mV
Response (at no load)	< 5μs
Control Response SW	4 steps (Slow, Medium, Fast, Top)

#### As a Galvanostat

Set Current Range	± 1A, ± 100mA, ± 10mA, ± 1mA, ± 100μA, ± 10μA, ± 1μA, AUTO
Accuracy	0.2% FS
Detect Voltage Range	2, 10V, AUTO
Control Response SW	4 steps (Slow, Medium, Fast, Top)

#### As an Electrometer

Measuring Voltage Range	± 10V, ± 2V, ± 1V, AUTO
Input Impedance	> 10 <sup>11</sup> Ω
Bias Current	< 5x10 <sup>-11</sup> A
Response Time	< 10μs
Potential Cancellation	± 2V (2V range), ± 10V (10V range)
Accuracy	± 0.05% ± 1mV

#### Recording Output

Potential	Conversion Rate 1:1
Current	Outputs full scale of current range: 1V
Filter	10Hz, 1kHz, DIRECT
External Output Control at PS	Conversion ratio 1:1, up to ± 10V possible
External Output Control at PS	1V corresponds FS of current range
Power Booster	10A, 20A, 50A
Monitor - Type	LCD
Monitor - Accuracy	± 0.2%
Power Requirement	AC 120V, 60Hz
Physical Dimension	200mm x 145mm x 420mm (WxHxD)
Weight	8 kg
Bath Voltage	± 30V
Max. Output Current	± 1A

