

CompactStattm

24 BIT
INSTRUMENT



PORTABLE USB POWERED POTENTIOSTAT/ GALVANOSTAT/ZRA WITH INTEGRATED IMPEDANCE ANALYSER

The CompactStat is a high end portable potentiostat that can be powered from the USB port of a laptop or PC without additional power supply. With its small footprint (<600 gram) and low power consumption, the CompactStat provides a truly mobile electrochemical measurement station that is ideal for use both in the lab and in the field. Its exceptionally high measurement resolution of 24bits gives it a unique level of measurement and control. Among its many applications are corrosion, analytical, nano, bio and battery/fuel cell/electrolyser testing.

THE COMPACTSTAT IS AVAILABLE IN 4 POWER CONFIGURATIONS

- $\pm 30\text{mA}$ @ $\pm 10\text{V}$
- $\pm 800\text{mA}$ @ $\pm 10\text{V}$
- $\pm 250\text{mA}$ @ $\pm 20\text{V}$
- $\pm 30\text{mA}$ @ $\pm 100\text{V}$

LOW NOISE AND GALVANIC ISOLATION

The CompactStat is electrically isolated from power lines and PC. It has superior noise immunity and is capable of determining very small signals, required in nanotechnology applications. Additionally, the instrument can be applied in situations where the sample must be disconnected from the common ground (floating).

COMPACTSTAT OVERVIEW

	Standard	CompactStat.h10800	CompactStat.h20250	CompactStat.h10030
Current compliance	$\pm 30\text{mA}$	$\pm 800\text{mA}$	$\pm 250\text{mA}$	$\pm 30\text{mA}$
Maximum output Voltage	$\pm 10\text{V}$	$\pm 10\text{V}$	$\pm 20\text{V}$	$\pm 100\text{V}$
Potentiostat				
Applied potential range	$\pm 4\text{V}$; 0.01mV res. (20bit) / $\pm 10\text{V}$; 0.02mV res.		$\pm 20\text{V}$; 0.04mV res.	$\pm 100\text{V}$; 0.2mV res.
Applied potential accuracy	0.2% or 1mV			
Current ranges	$\pm 1\text{pA}$ to $\pm 1\text{A}$			
Measured current resolution	0.00001% of CR, min. 0.6aA			
Measured current accuracy	10pA + 0.025% of FSR			
Galvanostat				
Galvanostatic current ranges	$\pm 100\text{pA}$ to $\pm 1\text{A}$			
Measured potential ranges	$\pm 1\text{mV}$ to $\pm 10\text{V}$	$\pm 1\text{mV}$ to $\pm 20\text{V}$		$\pm 1\text{mV}$ to $\pm 100\text{V}$
Measured potential resolution	0.00001% of range; min. 0.05nV			
Impedance analyser				
Frequency range	10 μHz to 3MHz			
Amplitude	0.15mV to 2.0V, and 0.03% to 100% of CR			
Peripheral				
Analog/Digital I/O	8 An in; 2 An out; 2 Dig in; 3 Dig out; I/E out; AC out; Channel XY out			
Compatibility	All options and modules			Some options and modules