



Vertex Entry level potentiostat



The affordable solution
for educational and
applied Electrochemistry!

Vertex potentiostat / galvanostat / ZRA:

- Compliance ± 1 A
- Applied scanrange ± 10 V
- Data acquisition rate 100 kHz
- Current ranges 100 nA – 1 A, min resolution 10 pA

Optional:

- FRA / EIS 10 μ Hz to 1 MHz
- Peripheral port

Applications:

- Education
- Batteries
- Fuel cells
- Sensors
- Biotechnology
- Corrosion

Address:

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**SPECIFICATIONS: Vertex****System Performance:**

4 electrodes	WE, CE, RE, S
Current compliance	±1 A
Maximum output Voltage	± 10 V
Potentiostat Bandwidth	>500 kHz
Stability settings Potentiostat/Galvanostat	High Speed, Standard, and High Stability
Programmable response filter	1 MHz, 100 kHz, 10 kHz, 1 kHz, 10 Hz
Signal acquisition	dual channel 16 bit ADC, 100.000 samples/sec

Potentiostat:

Applied potential range	±10 V, at 0.333 mV resolution
Applied potential accuracy	0.3%, or 2 mV typical
Current ranges	±100 nA to ±1 A in 8 steps
Measured current resolution.	0.015% of current range, minimum 15 pA

Galvanostat:

Applied current resolution	0.033% of applied current range
Applied current accuracy	0.3%
Potential ranges	±10 mV, ±100 mV, ±1 V, ±10 V
Measured potential resolution	0.004% of potential range, minimum 0.4 µV

Impedance Analyser:

	optional
Frequency range	10 µHz to 1 MHz
Amplitude	0.015 mV to 1.0 V, or 0.03% to 100% of current range
DC offset	16 bit dc offset subtraction, and 2 dc-decoupling filters

Electrometer:

Input impedance	>100 Gohm // <20 pF
Input bias current	<20 pA
Bandwidth	>1.5 MHz

Peripheral connections:

	optional
2 Analog in	0 to +5 V, 16 bits resolution, bandwidth 40 kHz
1 Analog out	0 to +4 V, 16 bits resolution
AC-out	±0.5 V sinewave 10 µHz-1 MHz with variable attenuation
Digital out	0 to 3.3 V
Channel-X and Channel-Y inputs	±4 V: to record impedance from peripheral devices

Environment:

Power requirements	100-240 V 45-65 Hz 20 VA via included 12 V supply
Interfacing	USB 2.0 compliant
Size	w x d x h = 13 x 27 x 4 cm
Weight	1.5 kg
PC requirements	Windows XP, Vista or 7, with free USB port