

Vertex.One

all-round potentiostat



the affordable solution for educational and basic electrochemistry

- **Compliance: $\pm 100\text{mA}$ / $\pm 21\text{V}$**
- **Applied scan range: $\pm 10\text{V}$**
- **Data acquisition rate: 300kHz**
- **Current ranges: 100pA – 100mA, minimum resolution 3fA**
- **FRA/EIS: 10 μHz to 250kHz (optional)**

System Performance:	Vertex.One.EIS
Current compliance:	±100mA
Maximum output voltage	±21V
Electrodes	WE, CE, RE, S , GND
Potentiostat bandwidth	>250kHz
Stability settings Potentiostat/Galvanostat	High Speed, Standard and High Stability
Programmable response filter	1MHz, 100kHz, 10kHz, 1kHz, 10Hz
Signal acquisition	Dual channel 18bit ADC, 300,000 samples/s
Potentiostat:	
Applied potential range	±10V, at 0.08mV resolution
Applied potential accuracy	0.2%, or 2mV
Current ranges	±100pA to ±100mA in 10 steps
Measured current resolution	0.003% of current range, minimum 3fA
Measured current accuracy	0.2%
Galvanostat:	
Applied current resolution	0.008% of applied current range
Applied current accuracy	0.2%
Potential ranges	±1mV, ±10mV, ±100mV, ±1V, ±10V
Galvanostatic current ranges	±10nA to ±100mA
Measured potential resolution	0.0008% of potential range, minimum 7nV
Measured potential accuracy	0.2% or 2mV
Impedance analyser (optional):	
Frequency range	10µHz to 250kHz
Amplitude	0.15mV to 2.0V, or 0.03% to 100% of CR
Electrometer:	
Input impedance	>1000Gohm // <10pF
Input bias current	<20pA
Bandwidth	>5MHz
Special functions:	
IR compensation	2V/Current range
Analog input	±10V, 16bit, bandwidth 40kHz
TrueLinear Scan generator (optional):	
Scan range	±10V, 0.08mV resolution
Scan rate	1µV/s to 10,000 V/s
Environment:	
Power requirements	100-240V, 45-65Hz, 25VA
Interfacing	USB
Size (w x d x h)	10 x 17 x 2.5cm
Weight	500g
PC requirements	Windows 8/10 with free USB port