IVIUM TECHNOLOGIES

PLUS MODULE:

CompactStatPlus
Hardware specifications

	Plus	Plus II
System Performance:		
Current compliance	±250 mA	±800 mA at ±8 V; ±500 mA at ± 10 V
Maximum output Voltage	±20 V	±10 V
Potentiostat Bandwidth	>1 MHz	
Stability settings	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	±20 V (0.66 mV resolution)	±10 V (0.333 mV resolution)
Applied potential accuracy	0.2%, or 2 mV	
Current ranges	±10 nA to ±100 mA	
High sensitivity current ranges	±1 pA, ±10 pA, ±100 pA, ±1 nA	
Measured current resolution	0.015% of current range, minimum 0.15fA	
Galvanostat		
Applied current resolution	0.033% of applied current range	
Applied current accuracy	0.2%	
Potential ranges	±2 mV, ±20 mV, ±200 mV, ±2 V, ± 20V	±1 mV, ±10 mV, ±100 mV, ±1 V, ± 10V
Measured potential resolution	0.003% of potential range, minimum 16nV	
Impedance Analyser		
Frequency range	10µHz to 2MHz	
Amplitude	0.015mV to 1.0V, or 0.03% to 100% of current range	
DC offset	16 bit dc offset subtraction, and 2 dc-decoupling filters	
Dynamic range	12 nV to 20 V, and 0.05 fA to 250 mA	12 nV to 10 V, and 0.05 fA to 500 mA
Electrometer		
Input impedance	>1000 Gohm //<8pF	
Input bias current	<10 pA	
Bandwidth	>16 MHz	
Special functions		
Ohmic drop compensation	2 V/current range, 16 bits resolution	
Safety features	automatic disconnect on internal/external exceptions	

Peripheral connections

8 Analog in, and 2 analog out	0 to +4 V, 16 bits resolution
2 Digital inputs, and 3 Digital outputs	0 to +5 V
I-out, and E-out	analog monitor for cell current and potential
AC-out	±0.5 V sinewave 10µHz-2MHz with variable attenuation
Channel-X, and Channel-Y inputs	±4 V: to record impedance from peripheral devices

Environment

power requirements	USB powered mode	Not available
	external adapter	100-240 V, 45-65 Hz, 12 VA
	at DC-connector	12 V, 1 A
Interfacing		USB 1.1 or 2.0 compliant
Size		w x d x h = 12 x 13 x 2.5 cm
Weight		0.5 kg
PC requirements		Windows XP or Vista, with free USB port