

ArrayPGstat Specifications

Chassis	
	Accommodates up to five 5-channel boards
Data Acquisition	National Instruments USB-6229 DAQ
Acquisition Speed	250 k samples/s (Aggregate) 9.25 kS/s/ch. (for 25 channels)
DAC Resolution	16 bits
5-Channel Board	
<i>Cell Control</i>	
Compliance Voltage	±15V
Max Output Current	±65mA max per Ch.
Rise Time	45 uS for 1k Ohm load (0%-100% signal)
Slew Rate	0.2 V/μs
Bandwidth	8 kHz (-3 dB, 1k Ohm load)
Applied DC Potential Ranges	1 (±10 V)
Applied Potential Resolution	0.3 mV
Applied Potential Accuracy	< 0.04% Full Scale Range (FSR)
Current Autoranging	Yes
Applied DC Current Ranges	2 (±250μA , ±65mA)
Best Applied Current Resolution	3 nA, 0.003% of FSR
Applied Current Accuracy	0.03% of FSR
Input Bias Current	500 pA
Input Impedance	250 GΩ parallel to 3 pf
Maximum Update Rate	4 μs
Maximum Scan Rate	100V/sec
<i>Potential Measurement</i>	
Measured DC Potential Ranges	1(±10 V)
Resolution	3 μV, 300 μV (0.006%, 0.003% of FSR)
Accuracy	0.08 or 0.03% of FSR
<i>Current Measurement</i>	
Measured Current Ranges	Potentiostat: 2 (± 250uA, ± 65 mA)
Potentiostat Min to Max	80nA to 65mA
Best Resolution	Galvanostat: 80 nA (0.003% of FSR) Potentiostat: 80 nA - 20 μA (0.06 - 0.003% of FSR In Order of Range)
Accuracy	Galvanostat: 0.03% of FSR; Potentiostat: 0.3 - 0.03% of FSR Depending on Range