

IviumStat2

24 BIT INSTRUMENT



High end general purpose potentiostat/galvanostat/ZRA with integrated impedance analyser

The IviumStat2 is a high end high power potentiostat with an exceptionally high 24bit resolution. That makes the instrument well suited for applications that require a wide dynamic range. The IviumStat2 is compatible with our complete range of modules and options. Applications include research, corrosion, battery/fuel/cell/electrolyser testing, analysis, bio- and nano electrochemistry, etc.

FULL COLOR DISPLAY WITH REAL TIME DATA!

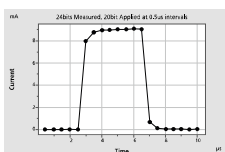
EXPANDABILITY

The IviumStat2 is fully compatible with all options and modules, including: integrated Bipotentiostat and True Linear Scan, the MultiWE32, ModuLight, multiplexers and all current and voltage boosters.

COMPLETE SOLUTION

The IviumStat2 offers a complete package. The hardware includes a built-in high-performance Frequency Response Analyser and all the standard electrochemical techniques. Complete measurement and data processing software is included.

VERY HIGH SAMPLE RATE



- Up to 2,000,000 pts/s
- 1,000,000 samples storage

AUTOMATION

Multiple analog and digital input and output ports are available that can be used to monitor and control peripheral equipment. The software integrates this functionality.

XP



High power potentiostat/galvanostat/ZRA

The XP range of potentiostats has been specially designed for high power applications such as battery research, electrolysis and fuel cell development. It is a merger of a potentiostat and a booster in a single housing and is equipped with a full color display that shows real time measurement results.

The XP has all the advantages of both the potentiostat and the booster, such as switching through all current ranges with full resolution at low and high power, high bandwidth to facilitate impedance measurements at high power, etc. It is equipped with an Emergency Off (EMO) functionality, as well as a direct connection for a thermocouple to monitor temperature. Both are accessible directly from the front panel. The XP is capable of all standard electrochemical techniques and includes a complete suite of IviumSoft control and data processing software.

THE XP IS AVAILABLE IN 4 POWER CONFIGURATIONS

- ±5A @ ±100V
- ±10A @ ±40V
- ±20A @ ±20V
- ±40A @ ±10V

SPECIAL FEATURES

- Full color display that shows real time measurement results and graphs.
- Direct thermocouple connection.
- Integrated Current Interrupt function.
- Separate cell cables for low and high currents to ensure the best performance.
- 19inch rack mountable housing.

APPLICATION

The XP is a high power potentiostat that has been designed for applications such as:

- Battery research
- (Bio) Fuel cell measurements
- Electrolysis
- Electrolysis



IVIUMSTAT OVERVIEW	Standard
Current compliance	±5A
Maximum output Voltage	±10V
Potentiostat	
Applied potential range	±10V; 0,02mV res. (20bit)
Applied potential accuracy	0,2% or 1mV
Current ranges	±1pA to ±10A
Measured current resolution	0,00005% of CR, min. 0,5zA
Measured current accuracy	20A + 0,025% of FSR
Galvanostat	
Galvanostatic current ranges	±10pA to ±10A
Measured potential ranges	±1mV to ±10V
Measured potential resolution	0,00001% of range; min. 0,15nV
Impedance analyser	
Frequency range	10µHz to 8MHz
Amplitude	0,02mV to 2,0V, or 0,03% to 100% of CR
Peripheral	
Analog/Digital I/O	2 An in; 1 An out; 1 Dig in; 3 Dig out; I/E out; AC out; Channel XY out
Compatibility	All options and modules



XP OVERVIEW	XP5	XP10	XP20	XP40
Current compliance	±5A	±10A	±20A	±40A
Maximum output Voltage	±100V	±40V	±20V	±10V
Potentiostat				
Applied potential range	±10V; 0,08mV res.	±10V; 0,08mV res.	±10V; 0,08mV res.	±10V; 0,08mV res.
Applied potential accuracy	0,2% or 2mV			
Current ranges	±100pA to ±10A			
Measured current resolution	0,003% of CR, min. 0,3pA			
Measured current accuracy	20pA + 0,025% of FSR			
Galvanostat				
Galvanostatic current ranges	±10nA to ±10A			
Measured potential ranges	±1mV to ±10V			
Measured potential resolution	0,00008% of range; min. 7nV			
Impedance analyser				
Frequency range	10µHz to 500kHz			
Amplitude (1)	0,15mV to 2,0V, or 0,03% to 100% of CR			
(2)	±5A	±10A	±20A	±20A
Peripheral				
Analog/Digital I/O	2 An in; 1 An out; 1 Dig in; 3 Dig out; I/E out; AC out; Channel XY out			