

# WMPG1000Ls

## Low Current Multichannel Potentiostat/Galvanostat



- For low power applications
- Perfect for sensor development
- ±10mA current over 5 current ranges
- Applied voltage range of ±10V
- 4 Kelvin probe type P'stat/G'stat circuit
- High accuracy
- Max 64 channels configuration
- Plugin channels for easy maintenance
- LAN communication

# Multichannel Potentiostat/Galvanostat for low current application

The multichannel potentiostat/galvanostat, WMPG1000Ls, is designed for low current applications and it is especially suitable for sensor development.

The WMPG1000Ls has a current control range of 1uA to 10mA and voltage range of -10V to +10V as standard. The accuracy for current and voltage on these channels is ±0.02% FSR. Max channel configuration is 64 per one PC.

The WMPG1000Ls does not only support various electrochemical techniques such as corrosion test techniques, electro-analytical techniques, cyclic voltammetry, chronoamperometry, and potentiometry, etc. but also carries out experiments on batteries. This feature allows user to perform general Echem experiments.

The Smart Interface(SI) software is a convenient and powerful tool allowing:

- easily making schedule files by using schedule editor
- selecting pre-defined techniques
- classifying/grouping channels by user's purpose
- monitoring detailed test data
- providing general/cycle graph format
- converting the data to ASCII or excel format

The compact size WMPG1000Ls can communicate with the computer by the way of a Local Area Network(LAN).

#### Features

- Multiple current ranges for improved accuracy over a wide range of testing conditions.
- High resolution 16 bit DAC/ADC for system control and data acquisition.
- Provides various techniques for sensor test.
- Supports techniques for battery studies such as CC/CV test, CC/CC test, CV test, as well GITT/PITT test for calculation of diffusion coefficient.
- High sampling rate.
- The various safety functions are provided to protect the cell and system from being damaged.
- The obtained data can be analyzed by IVMAN™ software without license code for further analysis.

#### • For Electroanalytical Measurement

- Cyclic voltammetry
- Linear sweep voltammetry
- Chrono-amperometry
- Chrono-coulometry
- Chrono-potentiometry

#### Corrosion Measurement

- Tafel plot
- Potentiodynamic
- Potentiostatic
- Galvanostatic
- Cyclic polarization
- Ecorr vs. time
- Linear polarization resistance

### For Energy Test

- Charge/Discharge(CC/CV) Test
- Constant Current Charge/Discharge(CC/CC) Test
- Steady state CV
- Pstat IV curve
- Gstat IV curve
- Electrochemical Voltage Spectroscopy(EVS) Test
- Galvanostatic Intermittent Titration Technique(GITT) Test
- Potentiostatic Intermittent Titration Technique(PITT) Test

#### Specifications

Control voltage range	±10V		
Compliance voltage	±12V		
Control current range	10mA, 5 ranges		
LED	Run: 1ea		
Input impedance	10 <sup>12</sup> Ohm		
Cell connection	4 probe type, alligator clip cables		
Max channels	64		
Voltage accuracy	±0.02% f.s.		
Current accuracy	±0.02% f.s.		
Voltage Control/Measurement			
Full scale ranges	±10V		
Resolution(16 bits)	0.3mV		
Current Control/Measurement			
Full scale ranges	Max. 10mA@10V		
Resolution	16 bit(0.0015% f.s)		
Communication	TCP/IP		
Sampling time 16channels/SIF	- Without option (Max 64 channels): 10msec - With option (AuxV and/or Temperature input (Max 32 channels): 10msec		
Size	W350.2xD328.1xH83.6mm		
All specifications are subject to change wi	thout notice.		

Won A Tech

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