

WBCS3000LeK8

8 Channel Low Current Battery Test System



- *Fixed specification*
- *Perfect for coin cell test at various C-rates*
- *$\pm 100\text{mA}$ current over 4 current ranges*
- *Applied voltage range of $\pm 5\text{V}$*
- *Potentiostat/Galvanostat circuit*
- *High accuracy*
- *Sampling time of 10msec*
- *Plugin channels for easy maintenance*
- *LAN communication*

Battery Charge/Discharge Test System for low current application

The 8 channel battery test system, **WBCS3000LeK8**, is designed for low current applications and allows users to make the right choice for their battery studies. As a spin-off of WBCS3000Le, the **WBCS3000LeK8** has the same features as WBCS3000Le but the channel expansion of **WBCS3000LeK8** is not available.

Coin cells are often used to test the capacities and rate capabilities of new materials in the initial stage and the **WBCS3000LeK8** can be a perfect choice for coin cell testing at high C-rates and half cell testing. Not only does the **WBCS3000LeK8** support various techniques for battery studies, but also carries out electrochemical techniques such as corrosion test techniques, electro-analytical techniques, cyclic voltammetry, chronoamperometry, and potentiometry, etc. and this feature allows user to perform general Echem experiments.

The **WBCS3000LeK8** has four current control ranges of 100uA to 100mA and voltage range of -5V to +5V and these specifications are fixed. The accuracy for current and voltage on these channels is $\pm 0.01\%$ FSR. The sampling time is 10msec.

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 **WBCS3000LeK8** is supplied with eight cell cables and can communicate with the computer by the way of a Local Area Network(LAN).

● Features

- Potentiostat/Galvanostat circuit : no time delay between the charge and discharge cycles.
- Supports techniques for battery studies such as CC/CV test, CC/CC test, C-rate/CV test, CV test, as well GITT/PITT test for calculation of diffusion coefficient.
- Tests the coin cell to charge-discharge cycles at the required C-rate.
- High sampling rate for calculating dynamic charge/discharge capacity ratings.
- 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 Energy Test

- Charge/Discharge(CC/CV) Test
- Constant Current Charge/Discharge(CC/CC) Test
- IV Curve Test
- Electrochemical Voltage Spectroscopy(EVS) Test
- Galvanostatic Intermittent Titration Technique(GITT) Test
- Potentiostatic Intermittent Titration Technique(PITT) Test
- Cyclic Voltammetry
- Potentiostatic Experiment With Half Cell

● Options

- Battery Jig
- Test Cell
- Dilatometer

● Specifications

Control voltage range	±5V
Control current range	100mA, 10mA, 1mA, 100uA (4 ranges)
LED	Run: 1ea
Input impedance	10 ¹² Ohm
Cell connection	4 probe type, alligator clip cables
No. of channels	8
Rise time	<50usec
Voltage accuracy	±0.01% f.s.
Current accuracy	±0.01% f.s.
Voltage Control/Measurement	
Full scale ranges	±5V
Resolution(16 bits)	0.15mV
Current Control/Measurement	
Full scale ranges	Max. 100mA@5V
Resolution	16 bit(0.0015% f.s)
Communication	TCP/IP
Sampling time	10msec

All specifications are subject to change without notice.

Local Distributor



WonATech Co., Ltd.
7 Neunganmal 1-gil, Seocho-gu,
Seoul, 06801, Korea
Tel: +82-2-578-6516 Fax: +82-2-576-2635
e-mail: sales@wonatech.com
website: www.wonatech.com