

# WBCS3000L32

## 32 Channel Low Current Battery Test System



- **32 channel system**
- **Perfect for coin cell test**
- **$\pm 10\text{mA}$  current over 3 current ranges**
- **Applied voltage range of  $\pm 5\text{V}$**
- **Potentiostat/Galvanostat circuit**
- **High accuracy**
- **Sampling time of 20msec**
- **Plugin channels for easy maintenance**
- **LAN communication**

### 32 Channel Battery Charge/Discharge Test System for low current application

The 32 channel battery test system, the **WBCS3000L32**, is designed for low current applications and it allows multichannel operation users to set up a battery test system at an affordable price.

Coin cells are often used to test the capacities and rate capabilities of new materials in the initial stage and the **WBCS3000L32** can be a perfect choice for coin cell testing and half cell testing. Not only does the **WBCS3000L32** support various techniques for battery studies, but also carries out electrochemical techniques such as corrosion test techniques, electroanalytical techniques, cyclic voltammetry, chronoamperometry, and potentiometry, etc. and this feature allows user to perform general Echem experiments.

The **WBCS3000L32** has a current control range of 100uA to 10mA and voltage range of -5V to +5V as standard. The accuracy for current and voltage on these channels is  $\pm 0.01\%$  FSR. The sampling time is 20msec for a standard 32 channel system.

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 **WBCS3000L32** 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, CV test, as well GITT/PITT test for calculation of diffusion coefficient.
- High sampling rate for calculating dynamic charge/discharge capacity ratings.
- Minimum order channel is 16 channels and extra channels can be added by the unit of 16 channels.
- 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	10mA, 3 ranges
LED	Run: 1ea
Input impedance	10 <sup>10</sup> Ohm
Cell connection	4 probe type, alligator clip cables
No. of channels	8
Slew rate	1V/usec
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. 10mA@5V
Resolution	16 bit(0.0015% f.s)
Communication	TCP/IP
Sampling time	32 channel system : 20msec 48 ~ 128 channel system : 50msec

All specifications are subject to change without notice.



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

Local Distributor