

# BCT-150

## BATTERY CELL TESTER

PERFORMANCE AND ENDURANCE TESTING

- Full automatic switching between 3 test modules: Cyclor Module, High Frequency Signal Module and Coulombic Efficiency Module
- Coulombic measurement reading up to 10ppm
- 200KHz High Frequency Signal Module
- Expandable system, up to 16 Cyclor Modules



The BCT-150 is a new system for battery cell testing resulting in improved battery measurement to better estimate SoH and SoC. This PC based machine integrates high power, high frequency and high accuracy in one tester platform. BCT-150 combines 3 modules 100A Cyclor Module, High Frequency Signal Module and Coulombic Efficiency Module for a high precision and fully automated battery test system. User programmable with automatic switching between the modules. Powered by D&V electronics' advanced test system software, the BCT-150 is the ideal platform for the battery cell testing future.

## Features

- Expandable up to 16 100A Cyclor Modules, allowing for testing one battery up to 1600 Amps or 16 batteries at 100A.
- High Frequency & Ultra Precision Modules can be shared among all 16 Cyclor Modules
- Provides an accurate method to determine important battery cell parameters
- Incorporates unique methods to predict the battery SoH and SoC, which can shorten the test duration significantly when compared to traditional aging tests
- Capable of performing a wide range of tests including Coulomb Counting, Electrochemical Impedance Spectroscopy (EIS), Drive Cycle and Life Cycle tests
- Electrochemical Impedance Spectroscopy testing (EIS) can be performed within a shorter period of time, because we can automatically switch between the 3 test modules - 100 A Cyclor Module, High Frequency Signal Module and Coulombic Efficiency Module

- Scalable and customizable system combined with user friendly software, allows for easy test customization and presentation of data
- Minimizes investment costs by sharing expensive test modules between independent battery channels

### Technical Data Measured Parameters

	Cyclor	EIS	Columbic
<b>Voltage Range</b>	1 — 6 V	1 — 6 V	1 — 6 V
<b>Max. Current</b>	100 A	5 A	2 A
<b>Parallel Connections</b>	✓	×	×
<b>Voltage</b>			
<b>Control Resolution</b>	3 mV	3 mV	1.8 mV
<b>Measurement Resolution</b>	1 mV	1 mV	1 $\mu$ V
<b>Accuracy</b>	$\pm 0.02\%$ FSR	$\pm 0.02\%$ FSR	10 ppm*
<b>Current</b>			
<b>Ranges</b>	5 A/25A/ 100A	5A	2 A/5 A
<b>Control Resolution</b>	2.5 mA / 12.5 mA / 100mA	2.5 mA	0.6 mA / 1.5mA
<b>Accuracy</b>	$\pm 0.02\%$ FSR	$\pm 0.02\%$ FSR	10 ppm*
<b>Bandwidth</b>	–	0kHz — 50kHz	–
<b>General</b>			
<b>AC Input Voltage</b>	230Vac 1 $\phi$		
<b>Software Platform</b>	BCT - PRO		



D&V ELECTRONICS LTD.  
130 Zenway Boulevard, Woodbridge, Ontario Canada L4H 2Y7  
sales@dvelectronics.com 1-905-264-7646

[www.dvelectronics.com](http://www.dvelectronics.com)

