

## Arbin EIS Integration



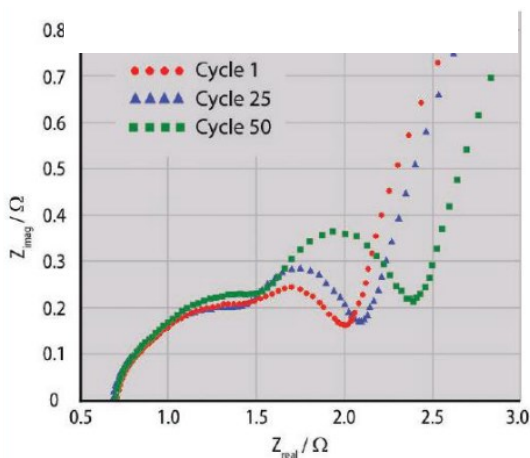
### Product Highlights

- Frequency range of 10 $\mu$ Hz to 2MHz
- Integrated with Arbin cycler, the frequency range is 10 $\mu$ Hz to 100kHz
- EIS data is integrated with Arbin data
- Fully maximize duty-cycle of EIS workstation and multi-channel Arbin tester
- No change in connection is necessary
- EIS integration available on Arbin LBT, MSTAT, & HSP systems
- Each EIS unit can be multiplexed across up to 32 Arbin channels

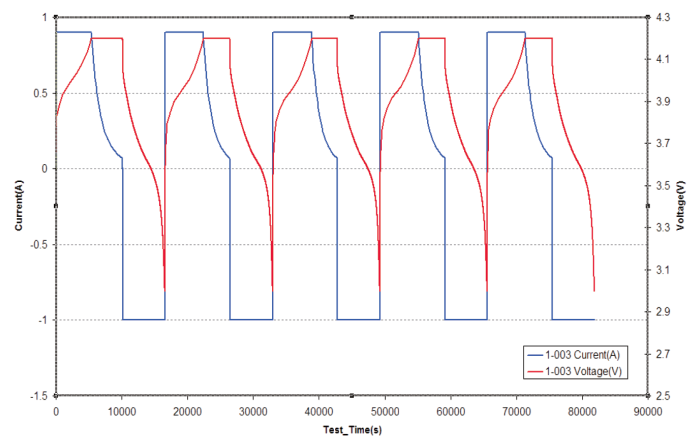
Arbin's integrated EIS solution combines the multi-channel, high-precision battery test performance of Arbin with advanced EIS capability for higher frequencies. These solutions share up to 32 Arbin channels (through multiplexing) with a single EIS unit to maximize the duty cycle of both instruments. No change in connection is necessary.

Arbin's EIS integration solutions are designed to support researchers with full or half-cell battery characterization, or any other electrochemical device. The equipment offers charge/discharge testing, PITT, GITT, and more along with EIS measurements.

Nyquist Plot



First 5 CC-CV Cycles



## Compatible Models

### Model- From 10 $\mu$ Hz up to 2 MHz

#### Gamry 1010E

Potentiostat / Galvanostat / ZRA

*Recommended for all Arbin LBT, MSTAT, HPS, and HSP testers.*

Capable of performing EIS from 10  $\mu$ Hz to 2 MHz  
 Max frequency of 100 kHz when integrating with Arbin cyler\*  
 $\pm 12$ V Maximum Applied Potential  
 $\pm 1$ A Maximum Current:  
 9 Current Ranges

#### Gamry 5000E

Potentiostat / Galvanostat / ZRA

*Recommended for Arbin LBT Cell-  
 HC testers.*

Capable of performing EIS from 10  $\mu$ Hz to 1 MHz  
 Max frequency of 100 kHz when integrating with Arbin cyler\*  
 $\pm 6$ V Maximum Applied Potential  
 $\pm 5$ A Maximum Current  
 6 Current Ranges

#### Gamry 5000P

Galvanostat

*Recommended for Arbin LBT Cell-  
 HC testers.*

Capable of performing EIS from 10  $\mu$ Hz to 20 kHz  
 Max frequency of 20 kHz when integrating with Arbin cyler\*  
 $\pm 6$ V Maximum Applied Potential  
 $\pm 5$ A Maximum Current  
 6 Current Ranges

#### Gamry Ref 3000

Potentiostat / Galvanostat / ZRA

*Recommended for Arbin LBT 25V  
 Module testers.*

Capable of performing EIS from 10  $\mu$ Hz to 1 MHz  
 Max frequency of 100 kHz when integrating with Arbin cyler\*  
 $\pm 32$ V Maximum Applied Potential  
 $\pm 3$  A (or  $\pm 1.5$  A @ 32V) Maximum Current  
 11 Current Ranges

\*Contour plot accuracies are available upon request.

**NOTE:** If your team plans to purchase an EIS unit at a later date, please notify Arbin Instruments of the EIS model to confirm compatibility prior to ordering your system. This will allow us to ensure compatibility, properly test, and integrate with the appropriate system.