

## CS350 Potentiostat + CS2020B Current Booster

CS2020B current booster can be used with model CS350 single channel potentiostat/galvanostat. This combination can be applied in the field of fuel cell, soft pack battery, battery core testing, electroplating etc. The maximum current output is  $\pm 20A$ .

CS350 can be used alone as ordinary single channel potentiostat, and can also be used with CS2020B booster.

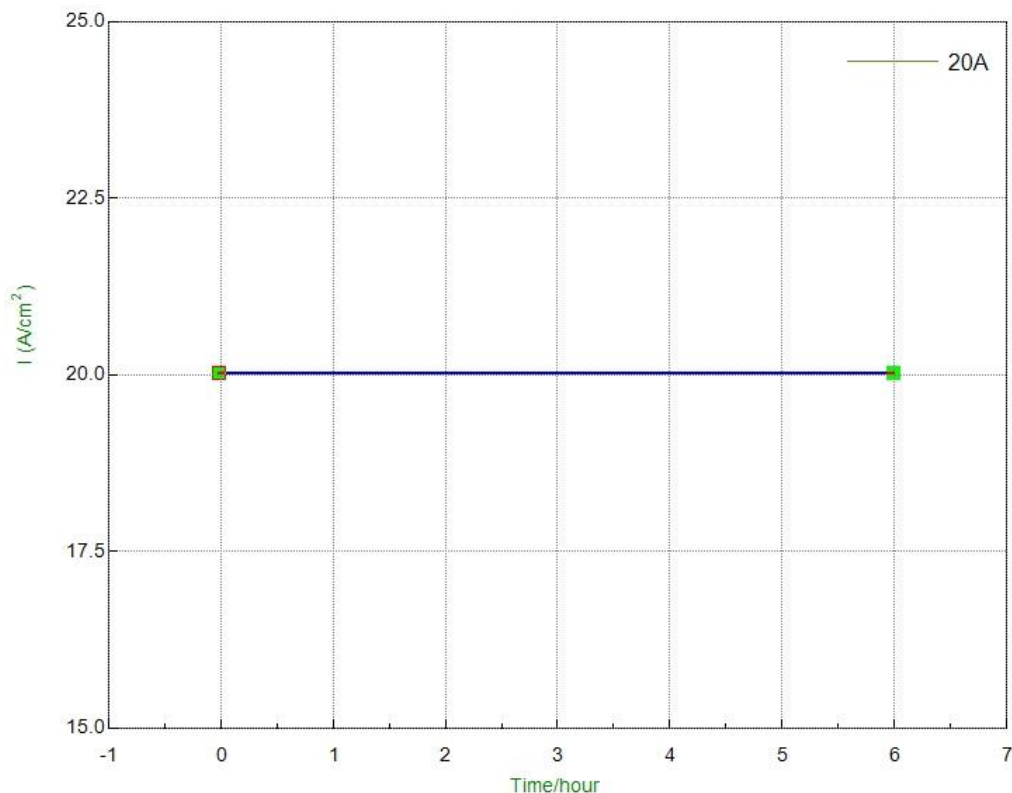


Fig. 1: Curve for galvanostatic experiment- output constant current as high as 20A



Fig. 2: Connection of CS2020B with battery core anode and cathode

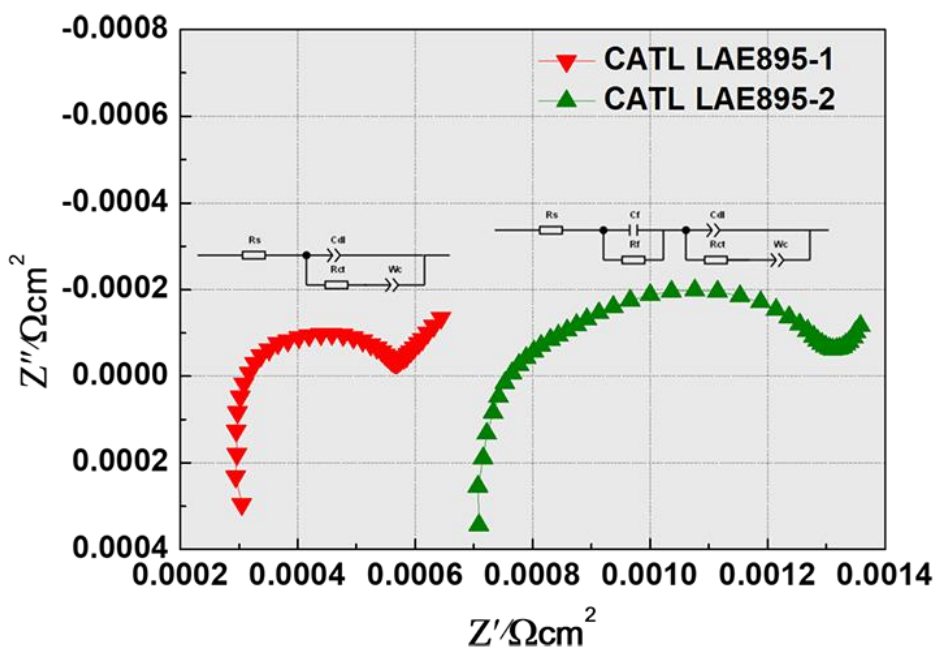


Fig. 3: EIS results of CATL-LAE895 battery core

### Key specifications (when combination of CS2020B+CS350)

Potential range:  $\pm 10V$

Current range:  $\pm 20A$

Current range: 20A fixed range

Compliance voltage:  $\pm 13V$  (when output  $\pm 20A$  limit current, maximum output  $\pm 10V@20A$ )

EIS Frequency range:  $\cong 50KHz$

Communication: RS485

## Techniques (when combination of CS2020B+CS350)

### Stable polarization

- Open Circuit Potential (OCP)
- Potentiostatic (I-T curve)
- Galvanostatic
- Potentiodynamic (Tafel plot)
- Galvanodynamic (DGP)

### Transient Polarization

- Multi Potential Steps
- Multi Current Steps
- Potential Stair-Step (VSTEP)
- Galvanic Stair-Step (ISTEP)

### Chrono Method

- Chronopotentiometry (CP)
- Chronoamperometry (CA)
- Chronocoulometry (CC)

### Voltammetry

- Linear Sweep Voltammetry (LSV)
- Cyclic Voltammetry (CV)

### Electrochemical Impedance Spectroscopy (EIS)

- EIS vs Frequency (IMP)
- EIS vs Time (IMPT)
- EIS vs Potential (IMPE)(Mott-Schottky)

### Battery test

- Battery Charge and Discharge
- Galvanostatic Charge and Discharge (GCD)
- Potentiostatic Charging and Discharging(PCD)
- Potentiostatic Intermittent Titration Technique(PITT)
- Galvanostatic Intermittent Titration Technique(GITT)

### Corrosion Measurements

- Cyclic polarization curve (CPP)
- Linear polarization curve (LPR)
- Electrochemical Potentiokinetic Reactivation (EPR)
- Electrochemical Noise (EN)
- Zero resistance Ammeter (ZRA)

### Extensions

Electrochemical Stripping/ Deposition

Rs measurement

## Standard supply list

### **CS350 Potentiostat /galvanostat 1 set**

Software 1 set  
Power cable \*1  
USB cable \*1  
Electrode cable \*2  
Dummy cell\*1  
Manual

### **Current Booster CS2020B - 1 set**

Power cable\*1  
Serial port connection cable \*1  
Electrode connection cable \*1  
CS2020B specialized electrode cable \*1

## After-sales Service:

1. Warranty period: 5 years. During this period, all service including repair is **TOTALLY FREE**.
2. Provide installation guidance and manual.
3. Lifetime free software upgrading (of the same model) and technical service

## Contact us

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