Abstract

Battery is the most widely used energy storage device. Since its invention, it has become a common power source for various household, commercial and industrial applications. Despite its ever increasing importance, many challenges remain unsolved to characterize and manage the battery. Among them, one fundamental issue is the estimation of state of charge (SoC), and Sate of health (SOH) of battery. SoC expressed in percentage, refers to the amount of capacity available in a battery. SoC is critical for modelling and managing batteries. If SoC is 100%, reflects a full battery and if SoC is 0%, reflects an empty battery. This project aims at developing an estimate the SoC and remaining runtime of a rechargeable battery. The combined estimation of SOC method is based on Coulomb Counting technique.


- Zenati, A.; Desprez, P.; Razik, H; "Estimation of the SOC and the SOH of Li-ion Batteries, by combining Impedance Measurements with the Fuzzy Logic Inference", IECON 2010 - 36th Annual Conference on IEEE Industrial Electronics Society, Page(s): 1773 - 1778

**Index Terms**

Computer Science  
Circuits And Systems
Keywords
SOC of Li-Ion Battery  SOH of Li-ion Battery.