

Project	Battery Management System For Solar Cell
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Abstract

Project on battery management system for solar cells Created for the study and research of lithium battery power management for solar cell systems. In this project, the creators studied the battery management system by using a Microcontroller. Applied to battery management To make it more convenient and efficient It also helps promote learning skills for the creator in programming on hardware and websites. Its function consists of various parts, namely the section for viewing voltage data of each battery cell and each module. Look at the temperature of each cell. Look at the electrical current of each module. View your battery's performance by logging your battery usage over time on the website. The battery cut-off section when the voltage, temperature is below or above the limits set by each cell and each module. For the tools used in system development, the creator uses HTML CSS JavaScript Vue.js as a platform to help develop websites through the Visual Studio Code program and uses C language to write hardware development programs through the Arduino IDE program. Use Google's Firebase database to develop real-time data transmission through the website that the creator has developed for this project. In issuing this report, work was based on the Microsoft Windows operating system.

Satisfaction evaluation results of battery management systems for solar cells in a case study It was found that the mean was 4.44 and the standard deviation was 0.09, which was at a high level.

Keywords Battery SolarCell Module