

Design and manufacture of a battery charger using solar energy

Giap Van Hoan

Abstract: In the context of the strong growth of renewable energy technology, this topic focuses on designing and manufacturing an efficient charging circuit system to optimize the battery charging process using solar energy. The main objective is to build a practical solution for applications requiring stable energy but with limitations on battery placement, such as houses, campsites, or industrial areas. The research method is based on a combination of electrical circuit design theory with practical testing on a solar energy system. The expected results of this topic not only confirm the feasibility and performance of the solution but also contribute significantly to the sustainable development of renewable energy use.

Keywords: charger circuit, solar cell, battery, renewable energy system, circuit design