

# Generation of Single Phase Energy from Inverter from Solar Tree

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**Abstract:** *The solar tree is an innovative way to harness solar energy by installing solar panels on a tree-like structure. The energy generated from the solar panels is converted into usable electricity through an inverter. This paper focuses on the generation of single-phase energy from the solar tree with the assistance of charge controller and inverter. The solar tree consists of multiple branches, each with several solar panels installed on them. The solar panels are connected to a central inverter that converts the DC energy generated by the panels into usable AC energy. The inverter is also designed in this paper is used to regulate the output voltage and frequency to ensure that the electricity produced is stable and usable.*

**Keywords:** Solar Tree, Portable Computers, inverter.

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