D**ESIGN AND CONSTRUCTION OF 1KVA SOLAR POWER INVERTER**

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**ABSTRACT**

The purpose of this project is to design and construct a 1000Watts (1KW) 220 Volts Inverter at a frequency of 50Hz. This device is constructed with locally sourced components and materials of regulated standards. The basic principle of its operation is a simple conversion of 12V DC from a battery using integrated circuits and semiconductors at a frequency of 50Hz, to a 220V AC across the windings of a transformer. An additional power supply to the public power supply with the same power output is thus provided at an affordable price.

Keywords: Inverter, integrated circuits, semiconductors, transformer, power supply.

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