

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI-590 002



A Project Report on
**“AN OPTIMIZED DESIGN AND
IMPLEMENTATION OF A 400W HIGH POWER
INVERTER WITH BUILT IN
CHARGER”**

**BACHELOR OF ENGINEERING IN
ELECTRICAL & ELECTRONICS ENGINEERING
(KSCST SPONSORED)**

PROJECT REFERENCE NUMBER: 38S1205



Karnatak Law Society's
**VISHWANATHRAO DESHPANDE RURAL INSTITUTE OF TECHNOLOGY
HALIYAL, UTTAR KANNADA-581329**

Abstract:

The purpose of this project is to design and construct a 500VA, 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.