

# **Inverter modification for low power**





## Overview

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How to convert 12V DC to 230-250v AC?

Here is a simple low power inverter that converts 12V DC into 230-250V AC (DC to AC Converter). It can be used to power very light loads like window chargers and night lamps, or simply give a shock to keep the intruders away. The circuit is built around just two ICs, namely, IC CD4047 and IC ULN2004.

How to reduce power dissipation in CMOS?

Although the power dissipation in CMOS is low compared to other logic families, it still dissipates a considerable amount of power during switching events in the form of heat. Voltage scaling is one of the solutions suggested to decrease the power dissipation of circuits. It helps in reducing the active losses.

What is 230-250v AC output?

The 230-250V AC output is available across the high-impedance winding of the transformer's primary windings. The article was first published in April 2005 and has recently been updated. In this project we would be constructing a simple low power inverter that converts 12V DC into 230-250V AC (DC to AC Converter).

Can adiabatic logic be used to implement low power circuits?

The technique can also be used to implement low power circuits using TFETs on lower supply voltages. Shinghal D, Saxena A, Noor A (2013) Adiabatic logic circuits: a retrospect. MIT Int J Electron Commun Eng 3 (2):108-114 Singh R, Mehra R (2013) Power efficient design of multiplexer using adiabatic logic. Int J Adv Eng Technol 6 (1):246



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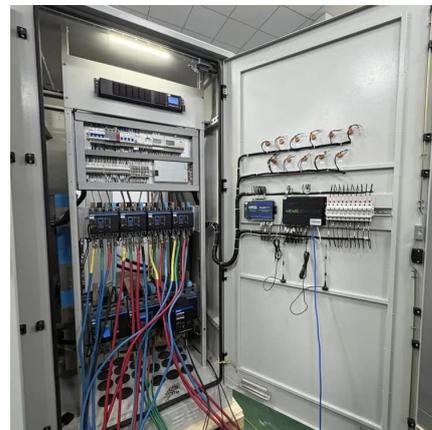
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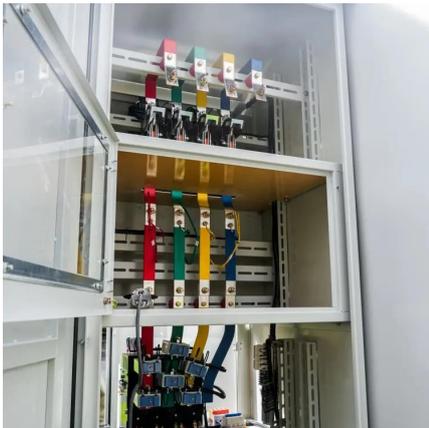
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