

# Easy-to-use grid-connected inverter





## Overview

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What is the control design of a grid connected inverter?

The control design of this type of inverter may be challenging as several algorithms are required to run the inverter. This reference design uses the C2000 microcontroller (MCU) family of devices to implement control of a grid connected inverter with output current control.

Can a grid connected inverter be left unattended?

Do not leave the design powered when unattended. Grid connected inverters (GCI) are commonly used in applications such as photovoltaic inverters to generate a regulated AC current to feed into the grid. The control design of this type of inverter may be challenging as several algorithms are required to run the inverter.

What makes a good inverter design?

High-efficiency, low THD, and intuitive software make this design attractive for engineers working on an inverter design for UPS and alternative energy applications such as PV inverters, grid storage, and micro grids. The hardware and software available with this reference design accelerate time to market.

What is an off-grid inverter?

Modern, off-grid inverters, or multi-mode inverters, can also be used to build advanced hybrid grid-tie energy storage systems. Many off-grid systems also use solar charge controllers (MPPTs), which are DC-coupled between the solar panels and battery, to regulate the charging process and ensure the battery is not over-charged.



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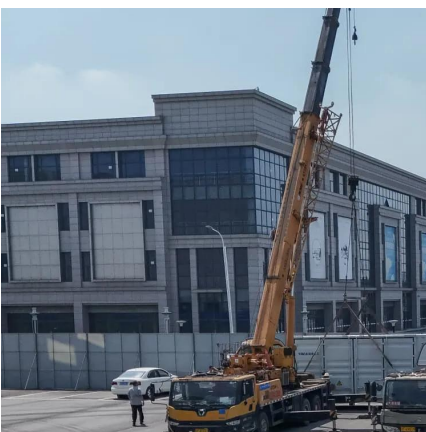


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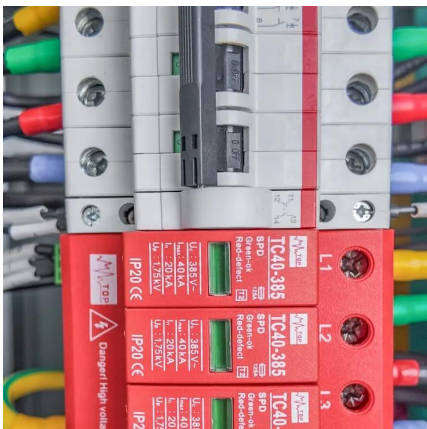
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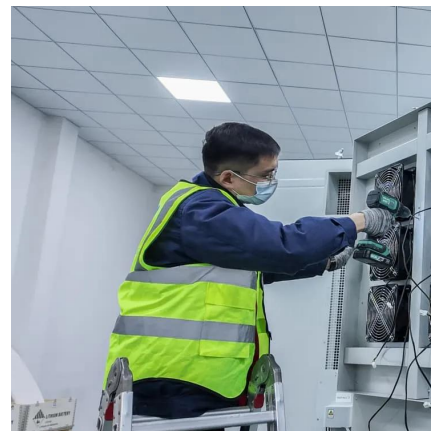
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