

The inverter has DC high voltage





Overview

What is the main circuit of an inverter?

The main circuit of an inverter includes an inverter DC power supply, IGBT bridge inverter, protection circuits, high frequency high voltage transformers, and high frequency high voltage silicon stack (Rectifier).

How does a high-voltage full bridge inverter work?

A high-voltage full bridge inverter works by converting the DC voltage V1 to a high-frequency square wave AC voltage. This AC voltage is then supplied to a 20kHz frequency high-voltage transformer T1, which, after the boost rectifier, provides power to the load. The inverter high-voltage full bridge drives the routing components and the IGBT power modules.

How to convert DC voltage to AC voltage?

Inverter's main circuit converts DC voltage V1 to a high frequency square wave AC voltage. This high-voltage AC voltage is then supplied to a 20kHz frequency transformer T1. The boost rectifier provides power to the load. By controlling the duty cycle of PWM1 and PWM2, a pulse width adjustable rectangular wave AC voltage is obtained. Inverter main circuit DC voltage V1 is converted to a high frequency square wave AC voltage for further processing.

What is a DC/DC converter?

TIDA-00281, TIDA-01505. TIDA-00366 PMP7797, PMP8657 What is th DC/DC Converter?

The DC/DC converter provides transfer of energy between the higher voltage battery system and the lower voltage (typically 12V) systems. The higher voltage supplies large loads such as traction motor, air-conditioning, and starters.



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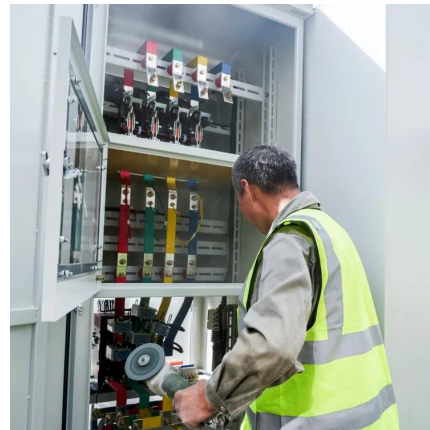


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Purpose: To provide an overview of complete high voltage power solutions in DC-DC Conversions and Tractions Inverters Introduction



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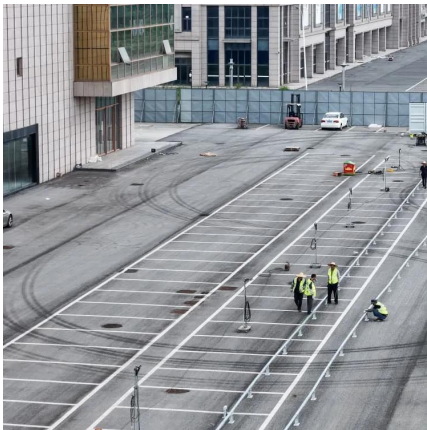
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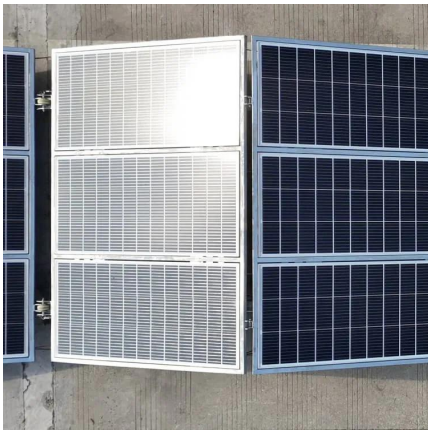
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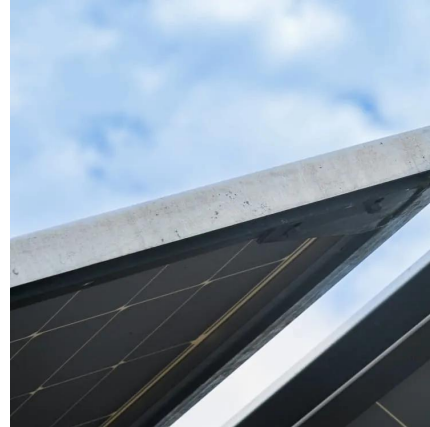
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Aug 11, 2019 · The inverter has multiple protection functions, such as short circuit, overload, over-voltage, under-voltage, over-temperature and reverse connection. Good physical properties.



High-voltage VS Low-voltage Inverters: What's the difference?

High-voltage inverters are designed to work with DC voltages typically ranging from 150V to 600V or even more. They are common in larger residential or commercial solar power systems.



High Voltage Inverter Design

The main circuit includes an inverter DC power supply, IGBT bridge inverter, protection circuits, high frequency high voltage transformers, high frequency high voltage silicon stack (Rectifier) ...

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