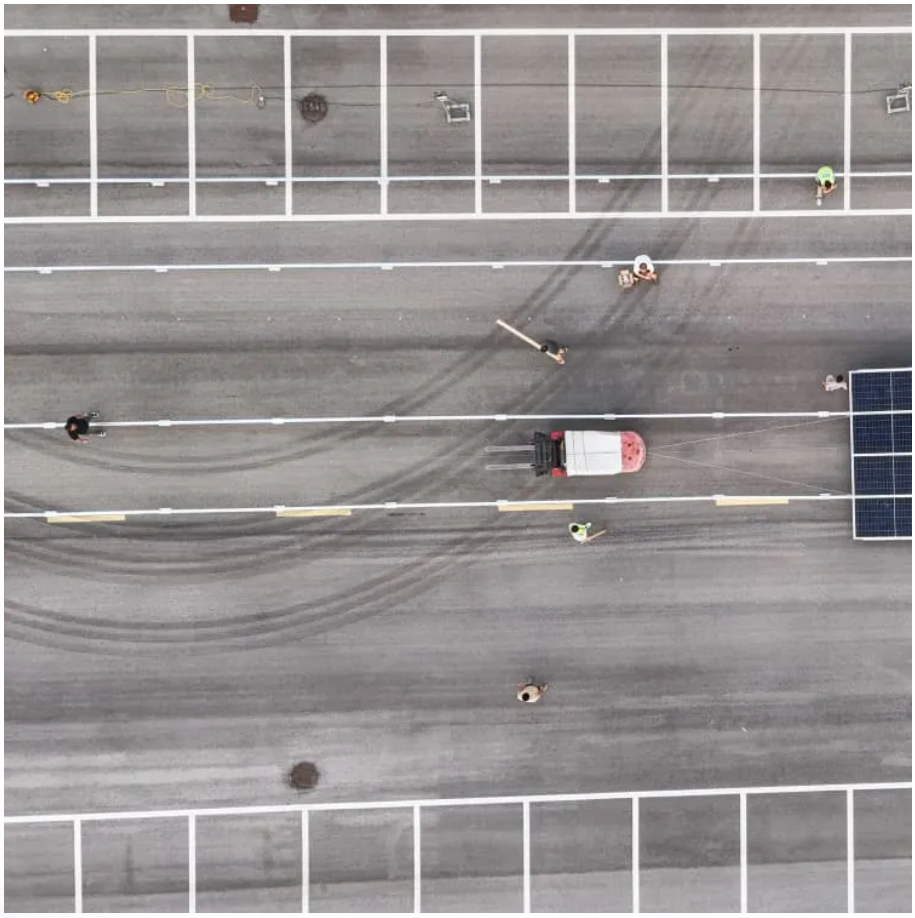
EIEI POWER

# Inverter lateral DC power transfer



## Overview

Is a bidirectional DC–DC converter suitable for energy storage systems?

Theoretical analysis, simulation results, and experimental results demonstrate the feasibility of the proposed circuit and its superior performance. This paper presents a novel bidirectional DC–DC converter for several applications such as energy storage systems.

What is the output power of a 2 kW inverter?

From Fig. 9, we can see that when the output power is 2 kw, the input power of the inverters is approximately the same, and the deviation of them is less than 1%. The efficiency of the system can reach to 92.8%, and the power loss of the whole system is about 163.7 W.

How to increase power capacity of an inverter?

There are three methods to enhance the power capacity: 1) paralleling multiple phase in an inverter [3, 4, 5, 6], 2) paralleling multiple inverters , and 3) paralleling multiple IPT systems . Paralleling inverters or IPT systems requires multiple dc sources or transmitting coils, which can lead to high cost and system design complexity.

Does a dedicated digital controller work in reverse power transfer (RPT)?

This article explores the implementation of isolated and bidirectional DC-to-DC power transfer by adapting a dedicated digital controller to work in reverse power transfer (RPT) in addition to its standard forward power transfer (FPT) function. Syste

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