

High voltage inverter in the field





Overview

With the rapid development of modern industrial technology, high voltage inverter as the core equipment of the power transmission system, in the electric power, petroleum, chemical industry, metallurgy and other industries plays a pivotal role. Who develops high voltage inverter systems for electric vehicles?

The vehicle manufactures and automotive tier 1 suppliers develop inverter systems for electric vehicles. Discussions were held with their design and research teams during direct meetings to understand future developments. Through these discussions, along with our own research, there are some clear high voltage inverter trends in the EV market. 3.

How can a high voltage inverter improve EV performance?

A better approach is to increase efficiency and decrease weight which extends the range of the EV and potentially reduces vehicle cost and running expenses. A significant contributor to achieving this is the inclusion of enhanced control, high voltage inverter modules in the vehicle. *

Corresponding author.

Which EV traction inverter is best?

For EV traction inverter, more efficiency and right performance are key. While IGBT is ideal for cost-optimized drive-train, SiC demonstrates higher efficiency under WLTP partial load scenario. Infineon offers the best scalability in market between IGBT and SiC, allowing customers to freely choose the technology for their needs.

Are Infineon IGBTs compatible with empower inverters?

market. Infineon's industry-leading discrete IGBTs are compatible with Empower's latest generation inverter in terms of packaging. Together with the high current density, ultra-low saturation voltage drop and superior parallel performance, Discrete products has increased power density by more than 20%.



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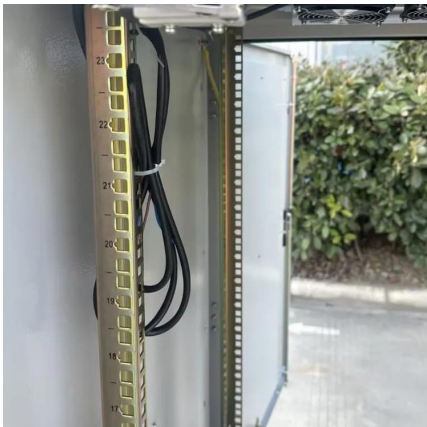


methods, ...



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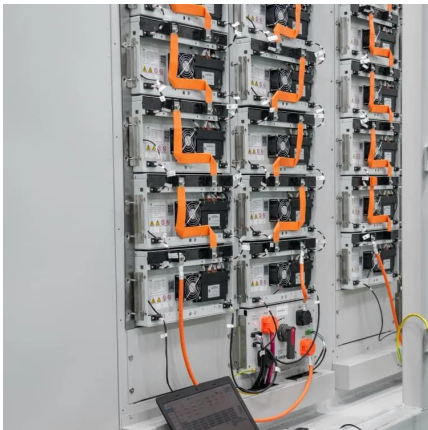
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Trends in High Voltage Inverter Systems

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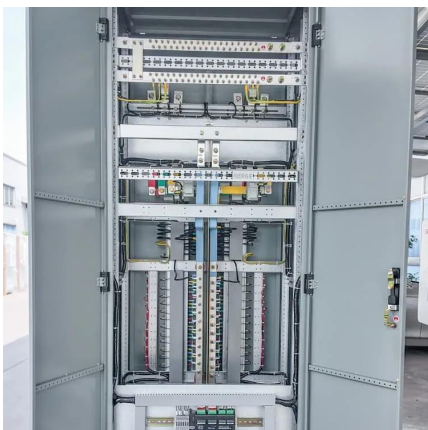


Traction Inverters A Driving Force Behind Vehicle ...

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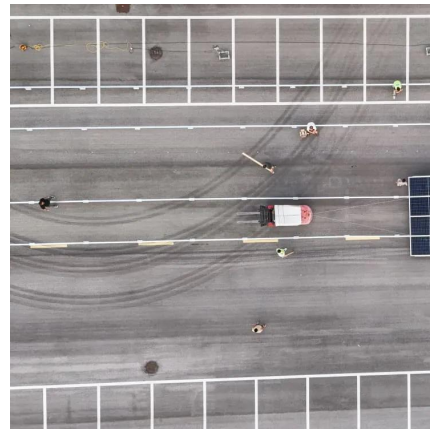


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