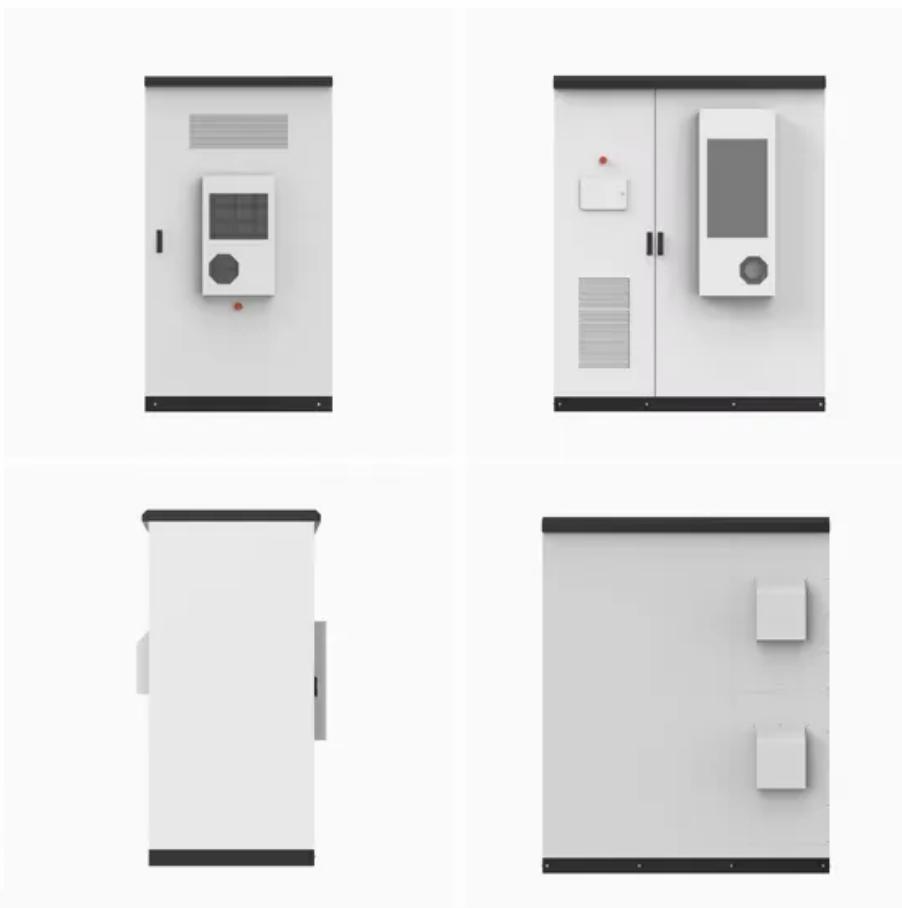




SolarInvert Energy Solutions

High frequency inverter front stage module



Overview

What is a high frequency inverter?

In many applications, it is important for an inverter to be lightweight and of a relatively small size. This can be achieved by using a High-Frequency Inverter that involves an isolated DC-DC stage (Voltage Fed Push-Pull/Full Bridge) and the DC-AC section, which provides the AC output.

Which power supply topologies are suitable for a high frequency inverter?

The power supply topologies suitable for the High-Frequency Inverter includes push-pull, half-bridge and the full-bridge converter as the core operation occurs in both the quadrants, thereby, increasing the power handling capability to twice of that of the converters operating in single quadrant (forward and flyback converter).

What is a reference design for ANPC inverter power stage?

This reference design provides a design template for implementing a three-level, three-phase, gallium nitride (GaN) based ANPC inverter power stage. The use of fast switching power devices makes it possible to switch at a higher frequency of 100 kHz, reducing the size of magnetics for the filter and increasing the power density of the power stage.

Why do inverter power stages need bidirectional power transfer?

Another requirement that is becoming more prevalent for inverter power stages is the need for bidirectional power transfer. This is important in storage ready inverters where there can be a need for the power from the grid to be stored in local power storage like a battery.

What is a three-phase inverter reference design?

This reference design is built in a modular construction to allow easy replacement of power switching devices to allow easy comparison between them. The following boards combine to form this three-phase inverter

reference design: A motherboard, comprising of the LCL filter, sensing electronics, bias power, switching relays and cooling fans.

What are the components of a 3 phase inverter?

The following boards combine to form this three-phase inverter reference design: A motherboard, comprising of the LCL filter, sensing electronics, bias power, switching relays and cooling fans. A TMDSCNCD280049C Control Card to support the DSP.

High frequency inverter front stage module



?A-NH?DC 12V TO AC 220V 380V 500W 1000W Inverter ...

1. High energy efficiency,, low power consumption, convenient and safe to use, energy saving and, widely used in, night camps, night market vendors, driving and family power outage ...

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...

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Wide temperature: -20-55°C
Modular design, easy to expand
The heating function is optional
Intelligent BMS
Cycle Life: ≥ 6000
Warranty:10 years



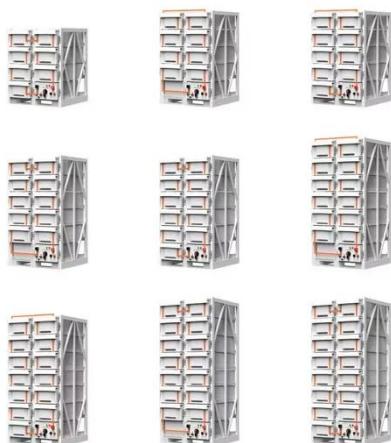
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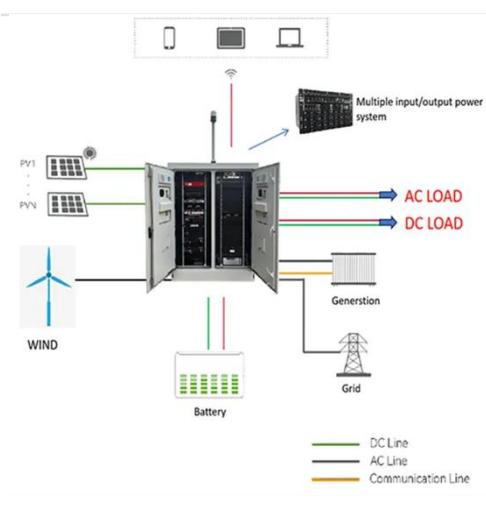
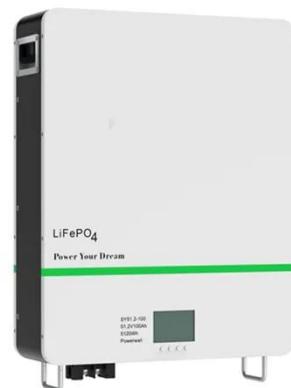
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