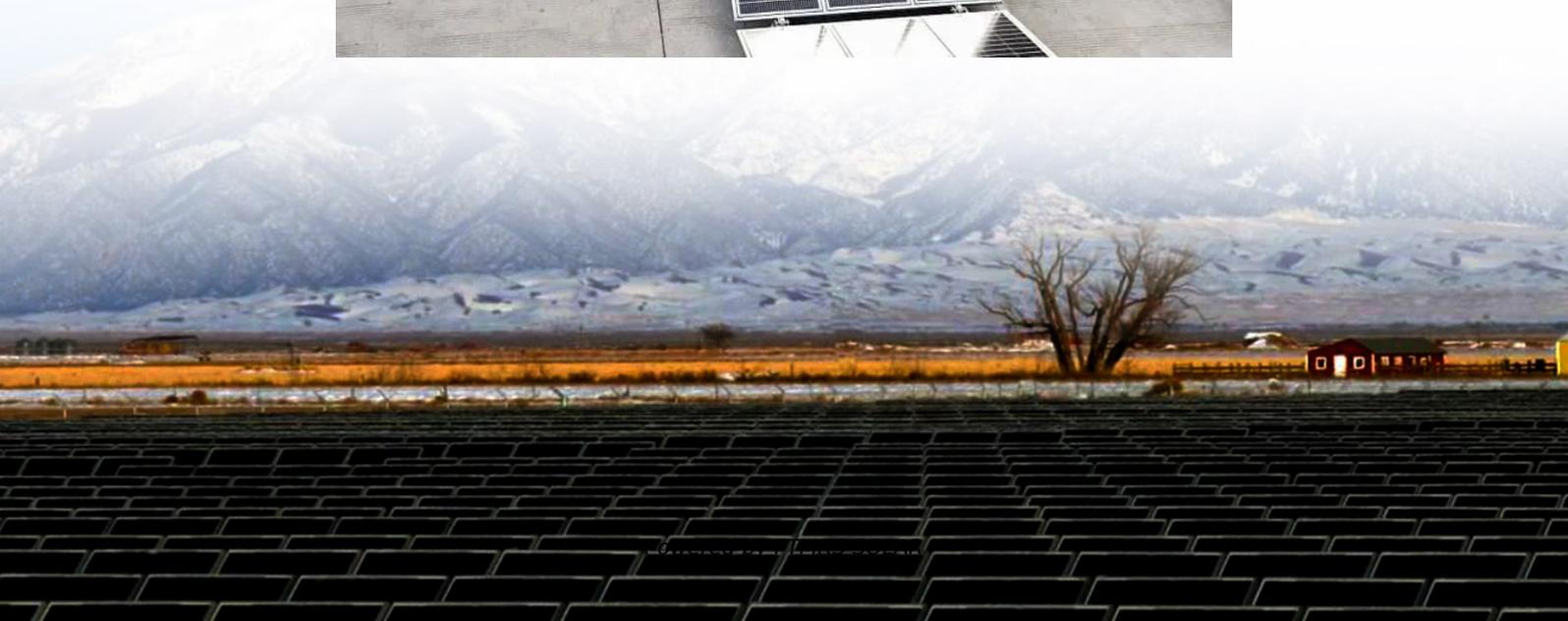


Inverter for the high voltage part before the tube





Overview

How does a high-voltage full bridge inverter work?

A high-voltage full bridge inverter works by converting the DC voltage V_1 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.

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).

What is a high power switch in an inverter?

The high-power switches are the most critical component in the inverter as they control the flow of current to the motor to generate motion. As such, the switches' are monitored and protected by sensing their temperature, voltage and current throughout their operation.

Are switching tubes zero-voltage turn-on?

switching tubes were zero-voltage turn-on. Figure 11. Driving waveform of IGBT inverter circuit. 8. Conclusion and power density of X-ray high voltage generator. The output parameters of 160kV&10mA were system could be met. Publishing, Beijing. Theory and Application 14(3): 51-53. generator In: IEEE Power Electronics and Motion Control Conf.



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