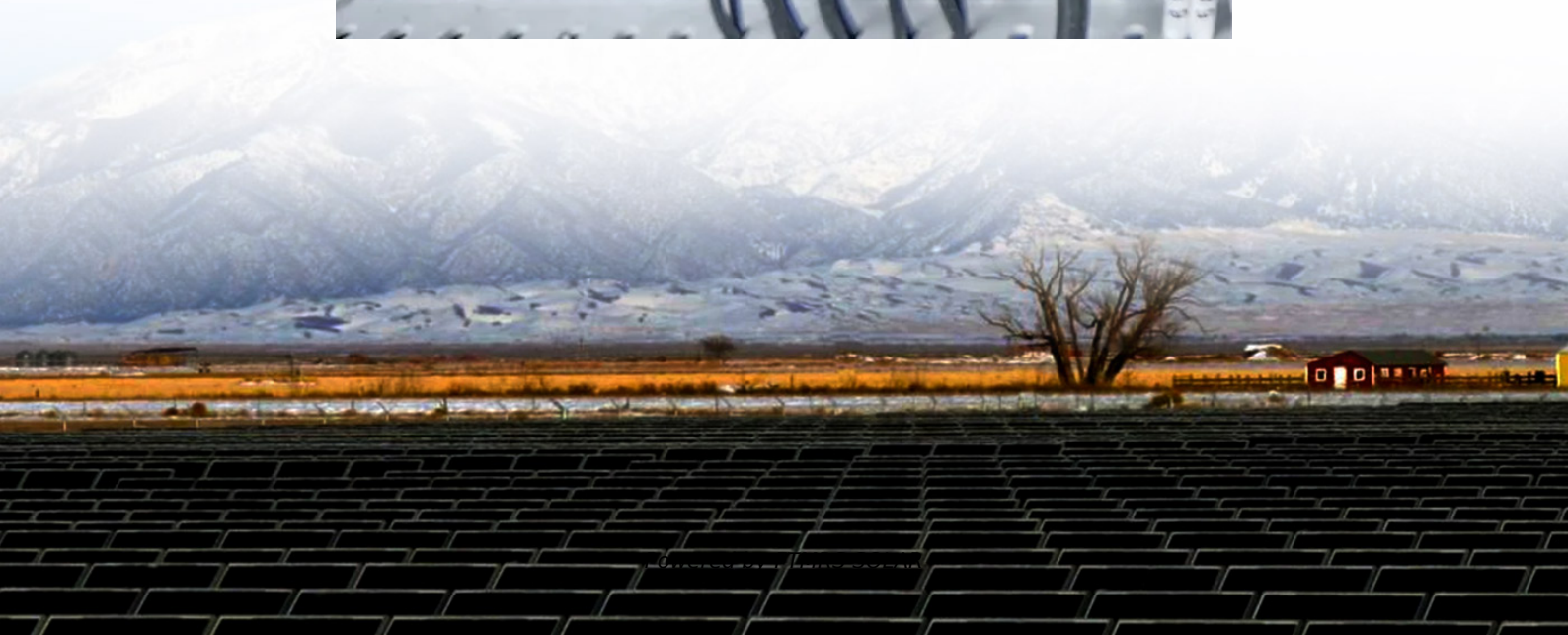
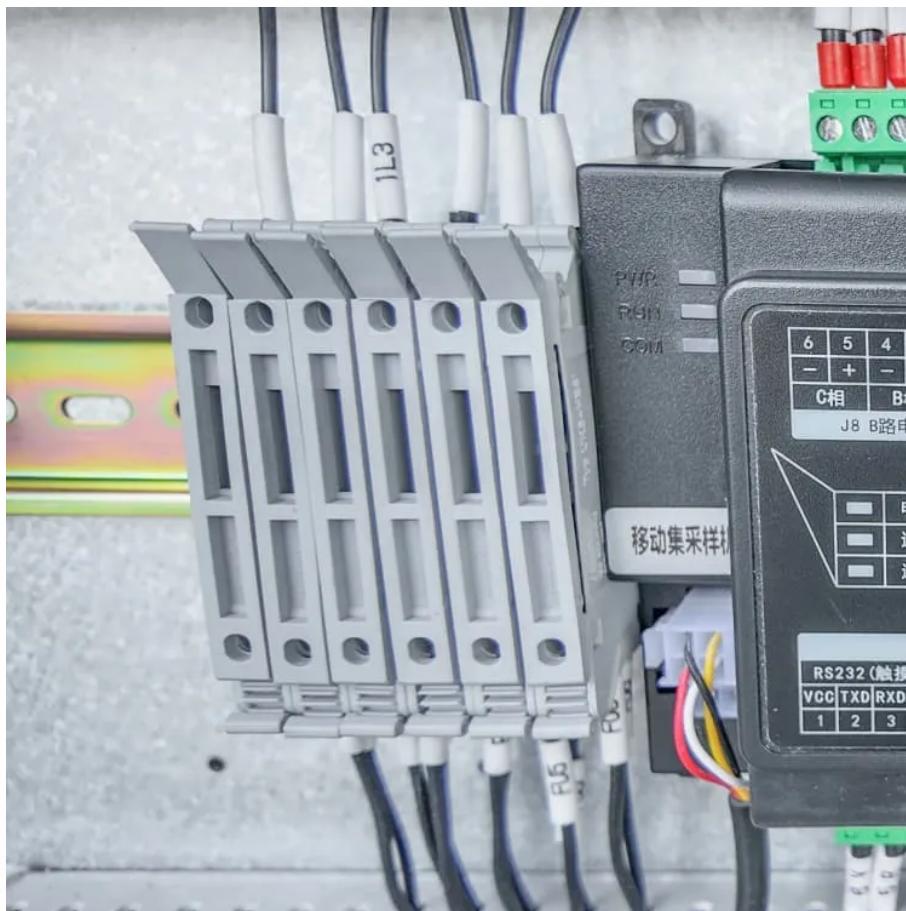


1500 solar Inverter IGBT





Overview

What if 1700V class IGBT is used in 1500V solar inverter system?

For example, when 1700V class IGBT is being used in 1500V solar inverter system in 2-level or NPC2 topology, at a VCE utilization ratio over 88% the failure rate will be unacceptably high despite short exposure to such input voltage.

What is IGBT in solar inverter?

In solar inverter applications, IGBTs (Insulated-Gate Bipolar Transistors) offer benefits compared to other types of power devices, such as high-current-carrying capability, gate control using voltage instead of current, and the ability to match the co-pack diode with the IGBT.

What is a 1500V solar inverter?

1500V solar inverter at megawatts level in NPC1 topology enabled by high-density IGBT module Centralized solar inverter applications in MW-class require high current rated modules or a high amount of paralleled modules.

What is the maximum IGBT voltage?

With maximum voltage of 1500V across DC link, at the first glance it is tempting to consider using 1700V class devices in 2-level or NPC2 topologies, for maximum utilization of IGBT voltage rating for maximum possible output power at lowest cost. However, the factor of cosmic radiation induced IGBT failure must be considered .



1500 solar Inverter IGBT

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