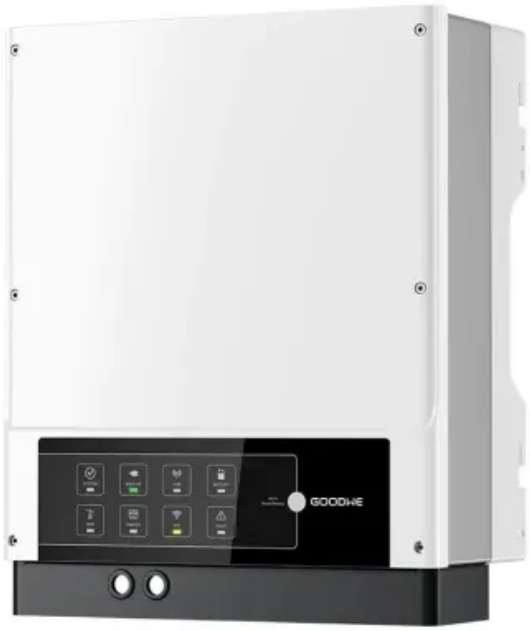
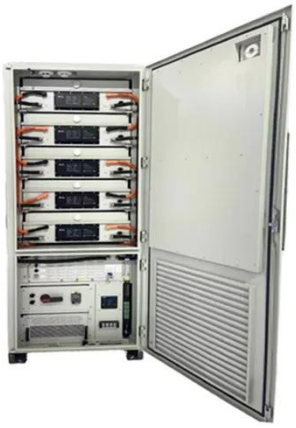
High-voltage inverter commutation



Overview

One such factor is commutation, which refers to the process of switching the current flow between different semiconductor devices within the inverter. Commutation significantly impacts the efficiency of inverters. It affects the power losses, thermal management, and overall. Commutation failures in high-voltage direct current (HVDC) transmission systems often occur within inverter stations, posing challenges to the safe and consistent operation of HVDC transmission projects. This paper examines data gathered from a wide-spectrum transient electromagnetic voltage. In the HVDC link system, this kind of faults also provide a voltage depression which lead to trigger a commutation failures in the inverter valves.

High-voltage inverter commutation



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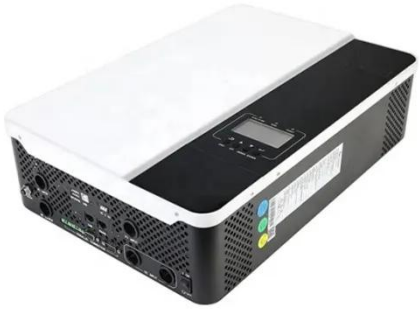

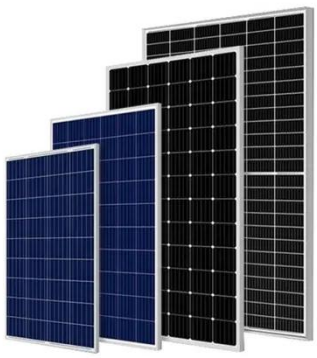

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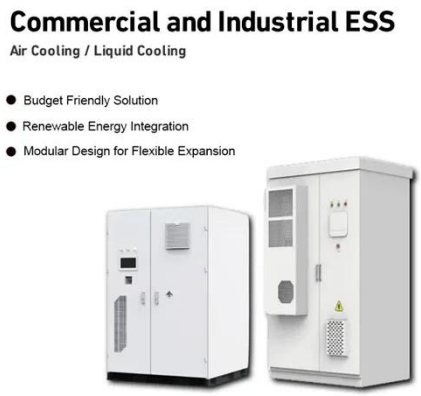

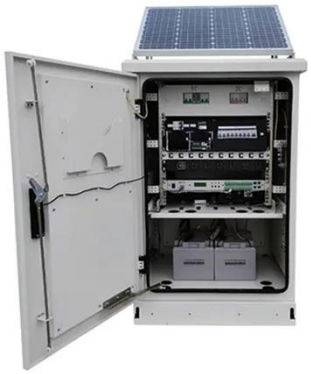

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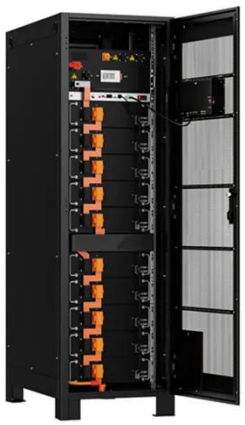

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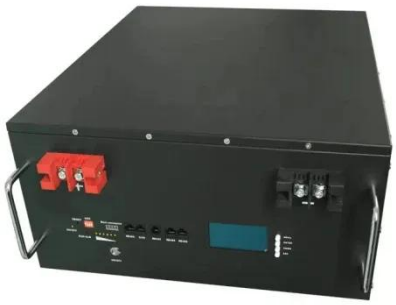

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