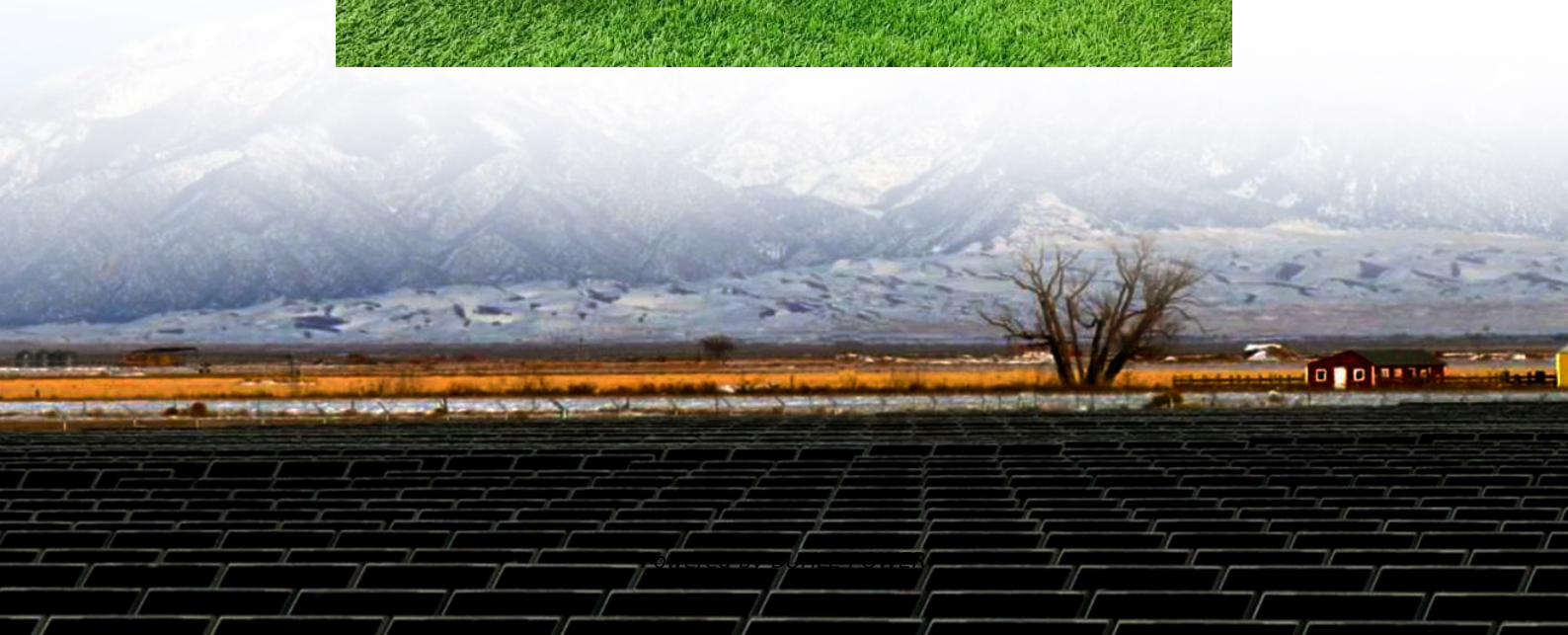


# Solar intelligent vertical control system





## Overview

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What is intelligent solar tracking controller?

The designed intelligent solar tracking controller was implemented based on a field-programmable gate array (FPGA). The designed control system was tested and evaluated using both experimental and simulation and it allowed simpler, faster, and precise control to the solar tracking system.

What is intelligent control in PV system?

Intelligent control as a more advanced technology has been integrated into the PV system to improve system control performance and stability. However, intelligent control for the PV system is still in the early stages due to the extensive calculation and intricate implementation of intelligent algorithms.

Should PV systems be centralized or upper intelligent controllers?

A centralized or upper intelligent controller deserves more attention. More intelligent algorithms should be introduced and modified to improve PV systems' intelligence and hybrid control. Combining these systems with traditional and intelligent methods will be a good choice in future research.

Can artificial intelligence improve solar energy production?

The utilization of artificial intelligence (AI) is crucial for improving the energy generation of PV systems under various climatic circumstances, as conventional controllers do not effectively optimize the energy output of solar systems. Nevertheless, the performance of PV systems can be influenced by fluctuations in meteorological conditions.



## Solar intelligent vertical control system

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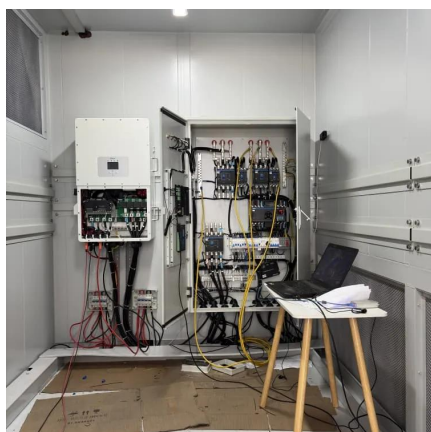
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