

4680 cylindrical solar container lithium battery





Overview

What is a 4680 battery cell?

Despite its larger form factor, the 4680 avoids the traditional challenges of thermal runaway by distributing thermal load more evenly and improving heat dissipation via its tabless construction. The 4680 battery cell represents more than a scaling-up of cylindrical cell dimensions—it redefines the relationship between cell, pack, and vehicle.

What is the power capacity of a 4680 cell?

At 100% SoC, the power capability of the 4680 all-tab cell is 543.7 W (corresponding to 6.7C), while the power capability of the 2170 single-tab cell, i.e., the LG M50T cell, is 78.4 W (corresponding to 5.2C). The power capability of the 4680 all-tab cell is 6.9 times that of the 2170 single-tab cell, i.e. the LG M50T cell.

Why is a 4680 battery better than other batteries?

- Higher energy density: This means that the 4680 battery can store more energy per unit volume or weight than other batteries. This results in longer driving ranges and lower battery weights for electric vehicles.
- Higher power density: This means that the 4680 battery can deliver more power per unit volume or weight than other batteries.

What is the rated capacity of a 4680 Virtual Cell?

The rated capacity of the 4680 virtual cell is calculated by scaling the electrode plate area of the 2170 counterpart. As a result, the capacity for the 4680 cell is 5.4 times higher than that of the 2170 cell. Table 1. Features of the model for 2170 and 4680 cell.



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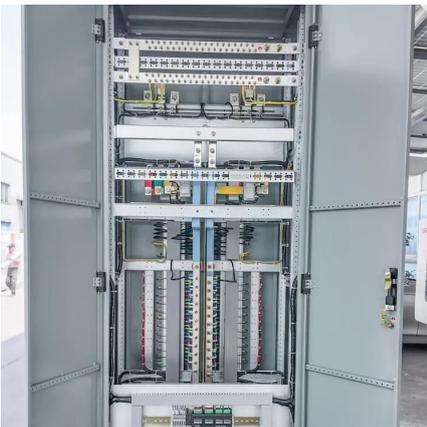


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