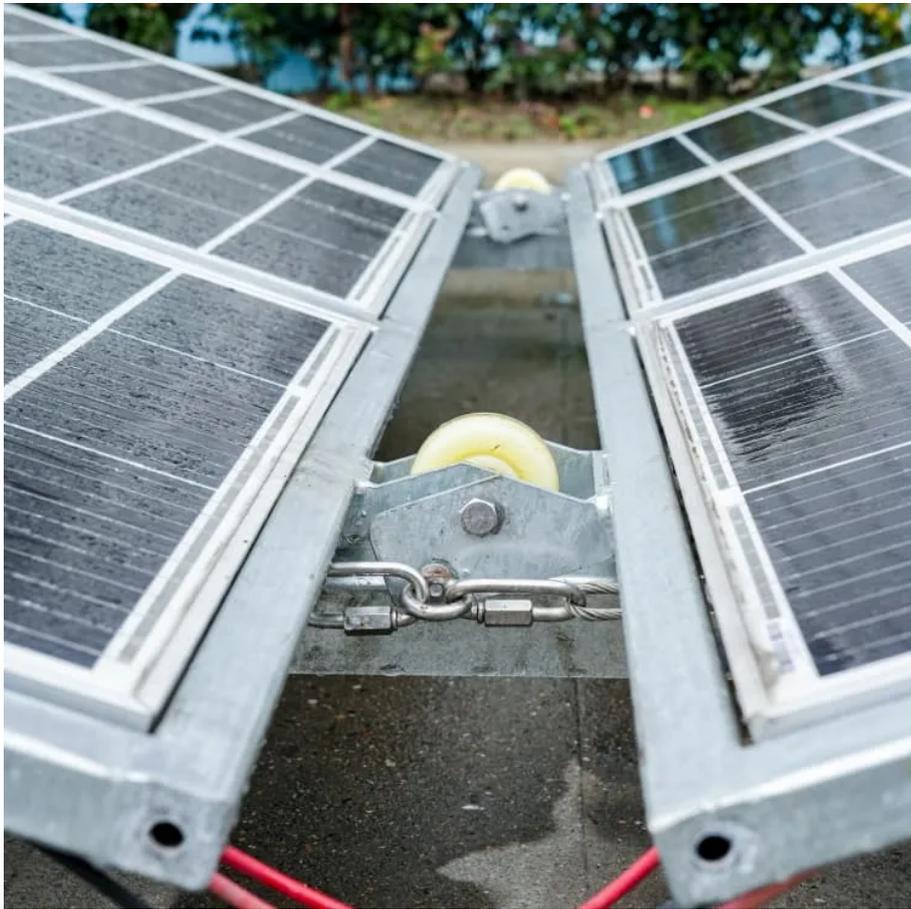


## A-Core Container

# DC fast charging lithium battery pack



## Overview

---

What is DC fast charging?

The dc fast charging is offered by the IEC CHAdeMO, SAE J1772 Combo and Tesla-S supercharger. The CHAdeMO is a conductive dc fast charger that allows up to 200 A charging at 50 kW. To establish secure communication between electric vehicle management system (EVMS) and charger control units, controller area network (CAN) protocol is applied.

How does a DC power pack work?

The ambient temperature is set to zero degrees Celsius, the model determines a suitable DC current profile, and the pack charge percentage changes. The initial condition of the pack is equal to 20% of the state of charge. The charge time available is equal to 15 minutes.

What is controlled\_current\_source in Bev DC charging port subsystem?

The Controlled\_Current\_Source block in the BEV DC charging port subsystem models the battery charger. The logic defined in the Controls subsystem determines the value of the current. A resistor models the HV cable and it is used to connect the charging port to the battery pack.

What is the initial battery state of charge?

The battery is heated during charging, with the initial battery state of charge equal to 20%. Case 2 - The vehicle is driven and immediately charged. The initial battery cell temperature is equal to 285 K. The battery is heated during charging, with the initial battery state of charge equal to 20%.

## DC fast charging lithium battery pack

---

### Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://www.a-core.pl>