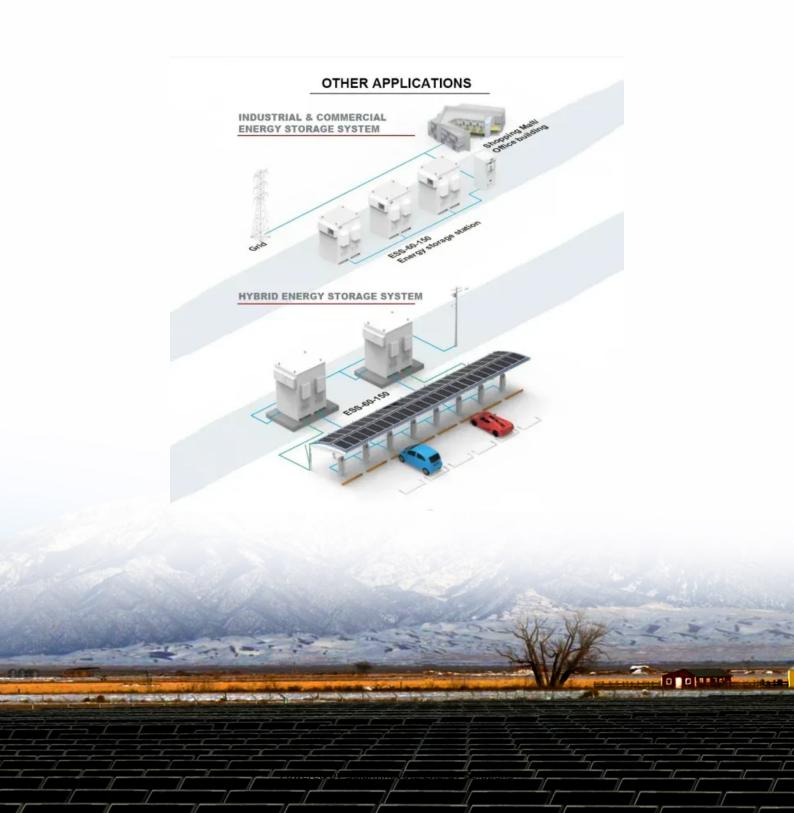


## **SolarInnovate Energy Solutions**

# **BDU** in battery pack





#### **Overview**

What is a breaktor® battery disconnect Unit (BDU)?

Featuring Breaktor® circuit protection, the battery disconnect unit (BDU) is designed to efficiently distribute power throughout the electric vehicle (EV) system. The BDU provides improved quality and simplified architecture by combining current switching and resettable bidirectional short-circuit protection with fast actuation (up to 900V).

What is BDU & PDU?

In the fields of Electric Vehicles (EVs) and Energy Storage Systems (ESS), components like the Battery Disconnect Unit (BDU) and Power Distribution Unit (PDU) are essential for maintaining power management, efficiency, and safety. While both contribute to power flow, they serve distinct functions.

What is a BDU battery?

Introduction: BDU is directly in contact with high voltage and large current, and its core function is responsible for the on-off of the main circuit, so BDU is also called the battery intelligent disconnection unit.

Where is BDU installed?

It is mainly installed in the front cabin of passenger cars or the rear cabin of buses. BDU is installed in the battery pack, which mainly contains main positive, main negative, fast charging positive, fast charging negative, precharging relay and pre-charging resistance.

What does a BDU do?

The BDU is primarily concerned with disconnecting the battery when necessary, ensuring safety and preventing damage. It monitors the battery's health and isolates it in case of emergencies or faults.

What is a BdU on a Volvo XC40?



The Battery Disconnect Unit (BDU) contains the contactors, fuses, pre-charge circuit and current sensors. This unit sits inside/on top of the battery pack and has all of the components for monitoring, activating, and deactivating the high-voltage battery system. Looking into the BDU of the Volvo XC40 Recharge.



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