

# **Nuku alofa BMS battery management control system architecture**





## Overview

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What functionalities can be found in a battery management system (BMU)?

Some other functionalities that can be in the BMU are interlock functionality or the real time clock and vector management system for the software. BMS Software Architecture: The battery management system architecture has different layers that abstract different parts of hardware.

What is a BMS master controller?

Data is sent to a BMS Master Controller, which aggregates and analyzes the information. Battery Management Unit (BMU): The Battery Management Unit (BMU) is a key component in a Battery Management System (BMS) responsible for monitoring and measuring critical parameters of the entire battery pack or its individual cells.

What are the components of a battery management system (BMS)?

The architecture of a BMS is generally divided into the following core components: 1. Cell Monitoring Each individual cell within a battery pack is closely monitored for parameters such as voltage, temperature, and state of charge (SoC).

How does a battery management system work?

A BMS can track SoH by assessing factors like cycle count, temperature history, and voltage fluctuations, helping predict the battery's lifespan and identify when it may need replacement. 3. Safety and Fault Protection Safety is a primary concern when designing BMS systems.



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