

## Belarusian mobile outdoor communication power supply BESS





## **Overview**

Do mobile Bess applications have communication interfaces?

This thesis project, carried out at Northvolt Systems, aims to analyze the existing and readily used communication interfaces for a specific set of mobile BESS applications. The analysis is performed by a literature review of typical mobile BESS applications with the identified corresponding communication interfaces.

What auxiliary loads are needed for a Bess project?

Fire safety systems, such as fire alarms, control panels and gas ventilation systems (if present). These auxiliary loads are essential for ensuring the safe and efficient operation of BESS projects. Therefore, providing a reliable power supply for these auxiliary loads is crucial.

What are the environmental conditions of a mobile Bess system?

Due to the flexible and mobile nature of mobile BESS, the environmental conditions can difer greatly for each system depending on the respective mobile deployments. Ranging from high temperatures and high humidity to the inverse during the same season, monitoring and control of the TMS is critical.

How much power does a Bess have?

The system is built of two main blocks. The PCS building block, responsible for the main control of the mobile BESS. The nominal power rating of the PCS block is 225 kVA, with a maximum peak power in the peak shaving mode of 275 kW. The second block is the modular battery pack.

What applications can a mobile Bess support?

The project aims to perform a thorough analysis of the various communication interfaces applicable to the applications that a mobile BESS can help support, of which, some typical VMS applications are construction sites, festivals, and



EV charging stations.

Do I need backup power for a Bess auxiliary load?

For certain projects, backup power must be provided for the BESS auxiliary load as required by the BESS supplier or fire codes. Some BESS suppliers mandate uninterrupted power to maintain the operation of thermal management systems, ensuring battery temperatures remain within desired limits to minimize degradation.



## **Belarusian mobile outdoor communication power supply BESS**



<u>Leveraging Battery Energy Storage for Enhanced Eficiency in ...</u>

BESS can act as a reliable backup power source during grid outages. The stored energy in the batteries is readily available to power critical telecom equipment, ensuring uninterrupted ...

## **Contact Us**

For catalog requests, pricing, or partnerships, please visit: https://legnano.eu