



Svolt Energy Technology Co., Ltd.

SVOLT



Six Topics For Discussion

SIX TOPICS FOR DISCUSSION

I. How to choose an energy storage system for your application?

II. What are the advantages of Svolt ESS comparing to other competitors?

III. How does the EMS and BMS operate?

IV. What kind of malfunctions might happen during operation? How does the alarming system work? How to detect and fix the broken cells or malfunctions?

V. What finance support can be given by Svolt cooperatives?

VI. An example of a calculation to select the size of the energy storage system suitable for the solar system and energy consumption?

I. How to choose an energy storage system for your application?

01

Calculate the PCS power and battery pack capacity according to the user's load power and working hours.

02

Select the application types according to the customer's application: PV consumption, peak/valley arbitrage, and emergency backup demand.

03

According to the customer's installation scenario, installation conditions, select the optimal storage distribution program..

04

Svolt's professional pre-sales engineers team can provide customized storage solutions according to customer input.

II. What are the advantages of Svolt ESS comparing to other competitors?

01

Top ten battery companies globally,

cells as the core part of the ESS products, determines the cost directly, and Svolt apparently has absolute advantages.

02

Rich experience in power battery R&D

and production;

03

Automotive-grade pack process technology

standard, as we know in this industry, standards for cars/vehicles are the most strict.

04

Svolt's professional pre-sales engineers team can provide **customized storage solutions** according to customer input.

05

222Ah 325Ah long-life cycle energy storage professional battery cells;

3S concept;

III. How does the EMS and BMS operate?

01

EMS Key Functions:

Peak shaving and valley filling.
Charging load limit protection;
Multi-branch PCS power coordination control.
Automatic battery maintenance program.
Charge and discharge power limit protection.
Compatible with 3-Level BMS function.
Intelligent cell temperature control
Flexible reverse power regulation, preventing reverse current.
Demand regulation;

02

BMS main functions:

Battery pack data and status display;
Battery data and event recording;
Intelligent equalization;
Alarm and protection;
Pre-charging function;

BMS is all about balancing the variation of the SOC across each stack in the pack assembly.

https://www.youtube.com/@SVOLT_ESS

IV. What kind of malfunctions might happen during operation? How does the alarming system work? How to detect and fix the broken cells or malfunctions?

01

During the operation of the energy storage system, faults such as **battery faults** (abnormal voltage, abnormal differential voltage, abnormal temperature, abnormal temperature difference, abnormal current, etc.), **air conditioner faults** (poor refrigeration, clogged filters, etc.), **PCS faults** (abnormal grid voltage, DC undervoltage, over-temperature, overcurrent, etc.), and communication faults between equipment, etc., will occur.

02

The **alarm** occurs during system operation, it will be through the equipment failure indicator, monitoring work station system alarm pop-up window or through the cloud platform pushed to the operation and maintenance micro-signal Wechat, etc.

03

Battery failure needs to be identified through regular operation data analysis. Serious failures will be directly alarmed through the BMS. Battery failure is repaired according to the severity of the failure. Ordinary failures can be restored to normal use by charging the faulty battery cells individually through the charger, while serious faulty batteries need to be repaired by replacing the new battery cells with the same capacity and parameters.

V. What finance support can be given by Svolt cooperatives?



01

EMC

Energy management contract

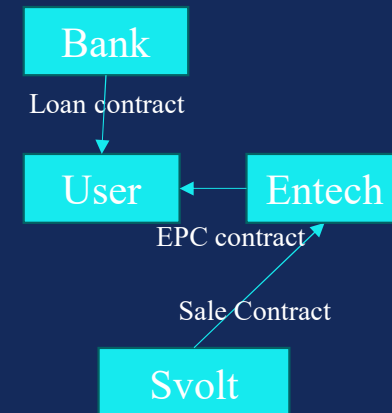
Users do not need to spend any money to get the ESS products, Investment Organizations will supply the ESS products to users, and users will sign the EMC contract with Investment Organization. The EMC contract stipulates that the users will get some percentage of profit.



02

Procurement contract

Users will buy ESS equipment from Entech Si Directly, and Entech will provide customers with design and construction service. Svolt will provide with bankability reports to help users to get the loan from bank.



VI. An example of a calculation to select the size of the energy storage system suitable for the solar system and energy consumption?

01

Industrial and commercial energy storage- Svolt has two products EP05 and **unit energy storage cabinet**, more suitable for rooftop photovoltaic + energy storage application scenarios;



02

As for ground-based PV, Svolt recommend to use **3.34MWh ES28 liquid-cooling containers**, grid-connected grade by high-voltage 10KV and above;



THANKS

