Instructions for use of battery data cloud platform

Welcome to the battery data cloud platform!

Platform login

Please use the official account and password to log in. Browse Firefox and IE (above 8.0) browsers are recommended. Website of platform landing: www.cellcloud.net

Your main functions:

01 Project overview

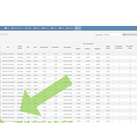
In project refers to the existence of a product or activity to meet a specific demand, such as the development of a battery system, the production of a battery system, and the application of the battery system. The project overview is the overall display of the project, including the project name, project number, project manager, project status, project-related information, and the following information, including the list of EV vehicles and their map distribution.

02 Vehicle state monitor

How to access the Vehicle Status page?

The "Vehicle Status" page is used to collect real time data and historical data of a new energy vehicle, and there are two ways to enter the "Vehicle Status" page from the home page:

① Find the vehicle from the map based on its location and click the vehicle icon. After confirming the pop-up current vehicle information, click the "More information (highlighted in blue font)" to enter the "Vehicle Status" page of the vehicle.



② Find the vehicle from the vehicle list at the bottom of the home page, and click the "More information (highlighted in blue font) to enter the "Vehicle Status" page of the vehicle.

What information can I find on the Vehicle Status page?

Basic information---including the project information of the vehicle, BMS software and hardware information, operation information of the battery pack.

Real-time status---live map shows the real-time running information of vehicles, including battery with voltage, temperature, etc. If the vehicle module network is not connected, the information displayed on this page is the last updated data.

Historical data---historical data of the battery pack of the vehicle.

Location information---you can browse the real-time location information of the vehicle, and support to view the moving trajectory of the vehicle by time (only vehicles using 4G/5G access modules).

BMS configuration---displays the calibration values of various parameters of the current BMS, which is beneficial to BMS online training and fault analysis.

Warning history---historically record every changing and disappearing trajectory of the vehicle.

Fault history---historically record the data of each vehicle fault, and support sorting by time, fault typeitem, etc.

Upgrade history---whether it is OTA upgrade in the air or USB upgrade in the field, every update of BMS software will be recorded and action points will be supported to realize the traceability of the whole life cycle software.

Equipment change---for distributed BMS system, every slave replacement will be detected and recorded in real time.

Data export---BMS terminal operation data in the cloud platform periodically during operation (the typical cycle is 30 seconds). This page can browse the detailed information of each operation data and support batch data export (only for network with Beam support authorized).

03 OTA Upgrade

Beam technology's intelligent battery management system enables its fleet in the industry to support the function of OTA (air) upgrade, and the battery data cloud platform provides a user-friendly and convenient OTA batch upgrade experience!

The standard process of OTA upgrade of BMS program is as follows:

Create OTA upgrade task on cloud platform

① On the homepage of the cloud platform, click the card name in the upper right corner, and then select the "Remote Upgrade" option in the pop-up window.

② After entering the "Task List" page, click the "Create Task" button in the upper right corner of the page.

③ In the "Create Task" page, select the project number in the upgrade-free item, fill in the upgrade reason, select the upgrade mode, upgrade vehicle, upgrade time, and upgrade file, and finally click the "Submit" button. After the upgrade task is successfully created, the upgrade task will automatically return to the "Task List" page, and the newly created upgrade task will be displayed in the "Task List".

Activate OTA upgrade task on cloud platform

① On the "Task List" page, click the OTA code of the task just created to enter the "Task Details" page.

The status of "Approved" will be displayed in the "Upgrade Status" column.

After the upgrade operation is completed, and a pop-up window will pop up asking for a verification code to activate this task.

② The upgrade verification code is automatically sent to the pre-set email mailbox when the upgrade task is created. Please check the email mailbox and enter the verification code.

Note: When the upgrade is successfully activated, the status of "Approved" will be displayed in the "Upgrade Status" column in the "Task Details" page.

Cloud platform sends OTA upgrade instruction to BMS.

After the upgrade task is activated, if the vehicle to be upgraded is active, the cloud platform will immediately issue an OTA upgrade instruction to the BMS of the vehicle to be upgraded. If the vehicle is not active, it will wait until the next vehicle is active. When the vehicle receives the upgrade instruction, the program upgrade will not be executed immediately because the vehicle is in the running state.

Note: After the OTA upgrade instruction is successfully issued, the content in the "Upgrade Status" column will be changed to "To be downloaded".

Program download

After BMS successfully received the "Upgrade Mode", it first connected to the cloud platform for identity verification and upgrade permission, and then began to download the program remotely.

Note: When the BMS is downloading the program remotely, the "Upgrade Status" column in the "Task Details" page will display the text "Downloaded progress %", and "Download completed" will be displayed after the download is completed.

Upgrade successful.

After the remote download of the program is completed, the BMS will automatically switch to the new version of the program on the next power-on and restart the program. The upgrade is successful. The status of the program in the cloud platform will be displayed as "Upgrade successful" in the "Upgrade Status" column in the "Task Details" page.

Note: "Upgrade successful" will be displayed in the "Upgrade Status" column in the "Task Details" page.

04 Management backgroud

The management backgroud includes project management, customer management, product management, management and account management, function permission management function.

How to enter the "Manage Backstage" page?

On the homepage of the cloud platform, click the user name in the upper right corner, and then select the "Manage Backgroud" option in the pop-up window.

What can I do when I enter the management backgroud page?

Project management---you can modify or project name, project number and project manager.

Customer management---you can create customers and assign equipment to them.

Group management---you can create groups and assign devices to them.

Equipment management---in the battery number, fuse number and vehicle model

corresponding to the equipment can be modified, and the equipment can be unbound from the customer.

Account management---you can create employee accounts and customer accounts, and set permissions for the accounts.

Based on this guide, you have learned the main functions and application methods of the battery data cloud platform. For more details, please contact the business representative of Beam Technology or visit www.

www.b_a.net/cloud