



GemOne®

BMS platform enablement

Agenda

- Target audience
- Goal of this session
- BMS Hardware
- BMS Platform
- BMS integration in GemOne Cloud platform

Target audience

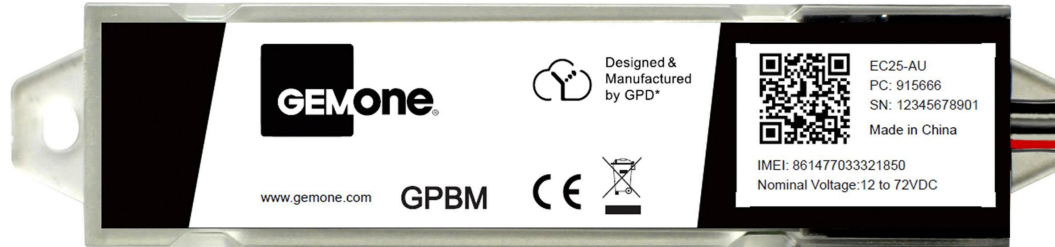
- Fleet manager
- Fleet administrator
- Service manager
- Service administrator
- Technical manager
- Telematics manager
- Telematics admin
- Maintenance manager
- Technician

Purpose of this presentation

Helping employees gain relevant BMS device and BMS platform knowledge to ensure a basic level of user confidence in the BMS platform.

-
-
-
-
-
-

BMS Hardware



Two types

- **Low Voltage** for 24V-60V batteries
- **High Voltage** for 60V-96V batteries

Coverage

Global coverage using **4G LTE** Cat 4 with **2G/3G fallback** using 3 hardware versions: EUX, AUX and AFX

Positioning

- GPS
- GLONASS
- BeiDou

Sensors

- Temperature: -20°C to 110°C
- **Electrolyte level**
- Digital inputs: 2
- Current - using Hall sensor
- Half & Full Voltage

Link to full installation manual: <https://www.gemone.com/install/BMS-EU>

Battery Monitoring Solution (BMS) Platform

- Installation prerequisites
- Login page
- Home page
- User management
- Branch management
- How to claim the BMS device
- Remote calibration of BMS device
- Location & geofencing
- Warnings
- Reports
- E-mail notifications
- Battery replacement process

Installation prerequisites

Before installation, please make sure to:

- Check if the rated battery voltage is **suitable for the BMS version** (low or high voltage).
- Check if the **max. charge or discharge current fits in the range of the hall sensor** (max. 300 or 800A)
- Have the following parameters at your disposal as these need to be entered in the platform during/ after installation for accurate measurements:
 - **BMS device**
 - Serial number (SN)
 - Pass Code (PC)



Installation prerequisites

Before installation, please make sure to:

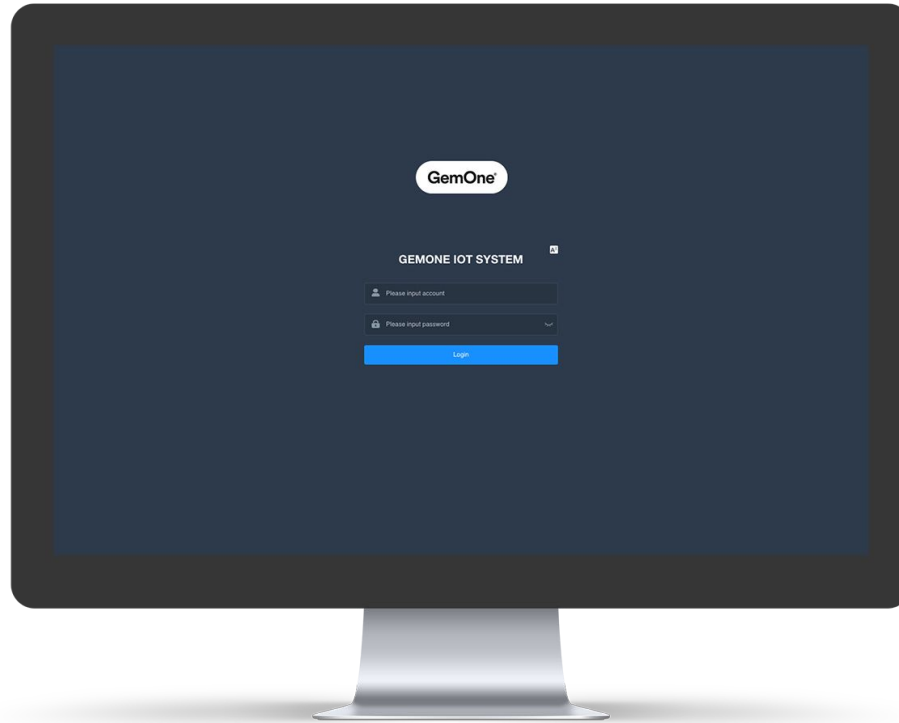
- Have the following parameters at your disposal as these need to be entered in the platform during/after installation for accurate measurements:

- **Battery**

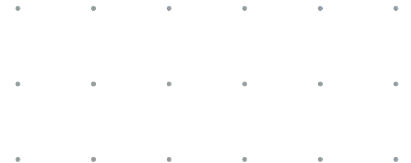
- Model
- Serial number (SN)
- Nominal voltage (eg. 24V, 48V, ...)
- Capacity in Ah
- C rating (C5, C6 or C20)
- Battery number of cells



Login page



<https://bms.gemone.com>



Home page

HOME

DEVICES

LOCATION

LEASE

WARNING

REPORT


FEEDBACK

SETTING

Help manual


HOME

All Devices 227



227
Total


Connectivity health



100 %
80 %
60 %
40 %
20 %
0 %

Sept 07 Sept 09 Sept 11 Sept 13 Sept 15 Sept 17 Sept 19

Abnormal 65



Battery Monitor

28.8% 65/227

Site overview

Site name	Total devices (units)	Total devices with warning (units)
Chandler	169	43
Battery Monitor	1	0
Chandler	1	0
Parker	1	0
Parker	1	0

Total 26 10page < 1 2 3 > Go to 1

Recent Warnings

Latest Update	Device Name	Details
6 Min. ago	GEM-Test-04	Temperature has reached 50°C, please cool down before use. (Level 1 warning)

User management

Functionality	Guest role	General role	Branch role
View home page	X	X	X
View devices	X	X	X
Add devices		X	X
Edit devices		X	X
Delete devices		X	X
View battery configuration		X	X
Edit battery configuration		X	X
View reports	X	X	X
View location	X	X	X
Edit geofencing		X	X
View warnings	X	X	X
View users			X
Create users			X
Edit users (+ roles)			X
Delete users			X
View branch companies			X
Create branch companies			X
Edit branch companies			X
Delete branch companies			X

User management

The screenshot displays a user management interface. On the left, a dark sidebar contains navigation items: HOME, DEVICES, LOCATION, WARNING, REPORT, **SETTING** (highlighted with a red box and an arrow pointing to a yellow callout), and Help manual. The main content area is titled 'Company's account' and features a search bar with a '+' icon (highlighted with a red box) and a 'Company name:' field. Below the search bar is a table with columns: Name, Account, Owned Company, Email, General user, and Operation. The 'Operation' column contains icons for edit, delete, and lock. A red box highlights these icons in the first row. An arrow points from the '+' icon in the search bar to a modal form titled 'Add account'. The modal form includes fields for Company name, Account, Password, Name, Email, Mobile, and Role, along with a 'Submit' button. A yellow callout box with the text 'Only visible with Branch role!' is positioned next to the 'SETTING' menu item.

Branch structure

Company name

Company's account

Name / Account

Company name:

Name	Account	Owned Company	Email	General user	Operation
...	No	
...	No	
...	No	
...	No	
...	No	

< 1 > Total 5

Add account

Company name

* Account

* Password

Name

Email

Mobile

Role

Submit

Only visible with Branch role!

User account settings

Account Settings

Login account	jeffrey.bellaant@gemone.com	
Name	jeffrey.bellaant@gemone.com	Has been set modify
login password	A high-security password can make the account more secure. It is recommended that you change your password regularly.	Has been set modify
mobile phone number	You have not set a mobile phone number. It is recommended that you set a mobile phone number	Not set Set up
E-Mail	You have set up an email jeffrey.bellaant@gemone.com [All kinds of system and service notifications sent by the GPD will be sent to your email address.]	Has been set modify
last login time	Sept 22, 2023 11:20	

ID	Date	Age	Name	ID	SOC	Voltage	Level	Temperature	Time	Actions
11026A	Sept 14, 2023	7 Days ago	mateco-Hungary Kit.	V109	97%	51.37V	Normal	27 °C	A Moment Ago	[Icons]
17853A	Sept 11, 2023	11 Days ago	mateco-Hungary Kit.	V109	77%	49.73V	Normal	26 °C	A Moment Ago	[Icons]
QP1	Sept 08, 2023	13 Days ago	Superior Beverage Group	V109	78%	24.19V	Normal	37 °C	A Moment Ago	[Icons]
26383	Sept 05, 2023	16 Days ago	FilmTec (Dupont)	V888	77%	36.92V	Normal	39 °C	7 Min. ago	[Icons]
17919A	Sept 05, 2023	17 Days ago	mateco-Hungary Kit.	V109	95%	51.06V	Normal	26 °C	6 Min. ago	[Icons]
26381	Sept 02, 2023	20 Days ago	FilmTec (Dupont)	V888	59%	36.8V	Normal	30 °C	A Moment Ago	[Icons]

Branch management

HOME / SETTING / COMPANY

Branch structure

Company name

Company's account

Name / Account

Company name:

Name	Account	Owned Company	Email	General user	Operation
Company Name	Company Account	Company Name	Company Email	No	✎ 🗑️ 🔒
Company Name	Company Account	Company Name	Company Email	No	✎ 🗑️ 🔒
Company Name	Company Account	Company Name	Company Email	No	✎ 🗑️ 🔒
Company Name	Company Account	Company Name	Company Email	No	✎ 🗑️ 🔒
Company Name	Company Account	Company Name	Company Email	No	✎ 🗑️ 🔒

< 1 > Total 5

Add Branch Company

Parent company

* Company name

Company address

Company website

Submit

Company info

Add Branch Company

Edit Company

Delete Company

Only visible with Branch role!

How to claim the BMS device

HOME / DEVICES

Find the SN on the device sticker

MCUID

Enter passcode(PC)

Type C5 C20 C6

Please select the operating voltage

Machine Brand

Machine Model

Site name

Full charge time 30 Min.

Remaining available disable enable

Positioning disable enable

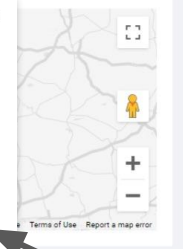
Show Ignition disable enable

Half voltage disable enable

Cancel Submit

Operation

Battery 1	Nov 19, 2022	20 Days ago	Company 1	V888	SOC 89%	Voltage 49.66V	Level Normal	Temperat... 8 °C	15 Min. ago	
Battery 2	Nov 18, 2022	21 Days ago	Company 1	V257	SOC 100%	Voltage 84.58V	Level Normal	Temperat... 26 °C	A Moment Ago	



Only visible with General or Branch role!

How to claim the BMS device in the portal

Mandatory input (first time)

- SN
- Device Name
- Model
- Capacity
- Owned Company
- (MCUID - autofill)
- Passcode
- System Voltage

Mandatory input (can be changed later)

- Device Name
- Owned Company
- Number of cell

Company specific:

Device Name =
Machine Name in GemOne Cloud
platform

**Essential for integration
in Gemone platform later on**

Optional (can be added later)

- Machine type
- Battery SN
- Positioning
- Show ignition
- Machine Type
- Machine Brand
- Machine Model
- Site name
- Full charge time
- Remaining available time
- Half voltage

How to claim the BMS device

The form is divided into two columns of input fields. The left column contains: * SN (with a red box and a hint 'Find the SN on the device sticker'), * Device Name (with an orange box), * Model (with a red box), * Capacity (with a red box), Owned Company (with an orange box), Machine Type (with a green box), * Number of cell (with an orange box and value '1'), battery SN (with a green box), Positioning (with a green box and toggle 'disable enable'), and Show ignition (with a green box and toggle 'disable enable'). The right column contains: * MCUID (with a blue dashed box and value '[AUTOFILLED AFTER SN INPUT]'), * Passcode (with a red box), Type (with a green box and radio buttons 'C5', 'C20', 'C6'), * System Voltage (with a red box), Machine Brand (with a green box), Machine Model (with a green box), Site name (with a green box), Full charge time (with a green box and value '30' and 'Min.'), Remaining available time (with a green box and toggle 'disable enable'), and Half voltage (with a green box and toggle 'disable enable'). At the bottom right are 'Cancel' and 'Submit' buttons. A legend on the right side of the form explains the color coding: a red box for 'Input is mandatory', an orange box for 'Input is mandatory, but can be changed later', a green box for 'Input is optional', and a blue dashed box for 'Input is autofilled'.

* SN Find the SN on the device sticker

* Device Name Please enter a name

* Model Select battery

* Capacity Please enter the battery capacity(Ah)

Owned Company company name

Machine Type Machine Type

* Number of cell 1

battery SN battery SN

Positioning disable enable

Show ignition disable enable

* MCUID [AUTOFILLED AFTER SN INPUT]

* Passcode Enter passcode(PC)

Type C5 C20 C6

* System Voltage Please select the operating voltage

Machine Brand Machine Brand

Machine Model Machine Model

Site name Site name

Full charge time 30 Min.

Remaining available time disable enable

Half voltage disable enable

Cancel Submit

Input is mandatory

Input is mandatory, but can be changed later

Input is optional

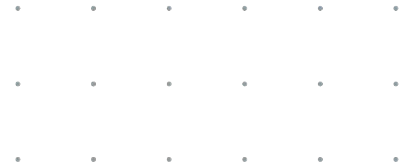
Input is autofilled

Remote calibration of the BMS device

Why is a (remote) calibration needed?

Without a calibration, it is more likely to experience:

- Inaccurate and erratic battery percentage readings (SOH, SOC, etc)
- Possible quicker battery drain
- Possible shorter total lifespan of the battery



Remote calibration of the BMS device

HOME / DEVICES

Map Satellite

Suffolk Coast & Heaths AONB

Graphical Description

- abnormal
- normal

Owned Company Search device Site name Default sort Reverse order

Device Name	Setup Time	Monitored duration	Owned Company	Firmware Version	Realtime Data	Latest Update	Operation
	Nov 28, 2022	11 Days ago		V888	SOC 89% Voltage 49.66V Level Normal Temperat... 8 °C	A Moment Ago	Calibrate Set up

Advance Calibrate

SOC : 74 % Set up

Voltage : 23.15 V Set up Calibration value reset

Aux voltage acquisition : 0.00 V Set up

Current : 0 A Set zero

Aux current acquisition : 0.00 A Set zero

Location & geofencing

HOME / LOCATION 🌐 📶 °C GemOne v1.6.3

Setup Time	Device Name	Owned Company	geofencing
Sept 14, 2023 22:51:31	<input type="text" value="Search device name/serial number"/>	L	geofencing <input type="checkbox"/> disable <input checked="" type="checkbox"/> enable
Sept 11, 2023 20:56:46			geofencing <input type="checkbox"/> disable <input checked="" type="checkbox"/> enable
Sept 09, 2023 06:27:27			geofencing <input type="checkbox"/> disable <input checked="" type="checkbox"/> enable

HOME 🌐 📶 °C GemOne v1.6.3

Battery name 1 | OTHER / OTHER / Common / 700 Ah / 48 V | Firmware Version: V259

geofencing disable enable

Set fence [Edit](#)

radius

Note: drag center of existing boundary to move around

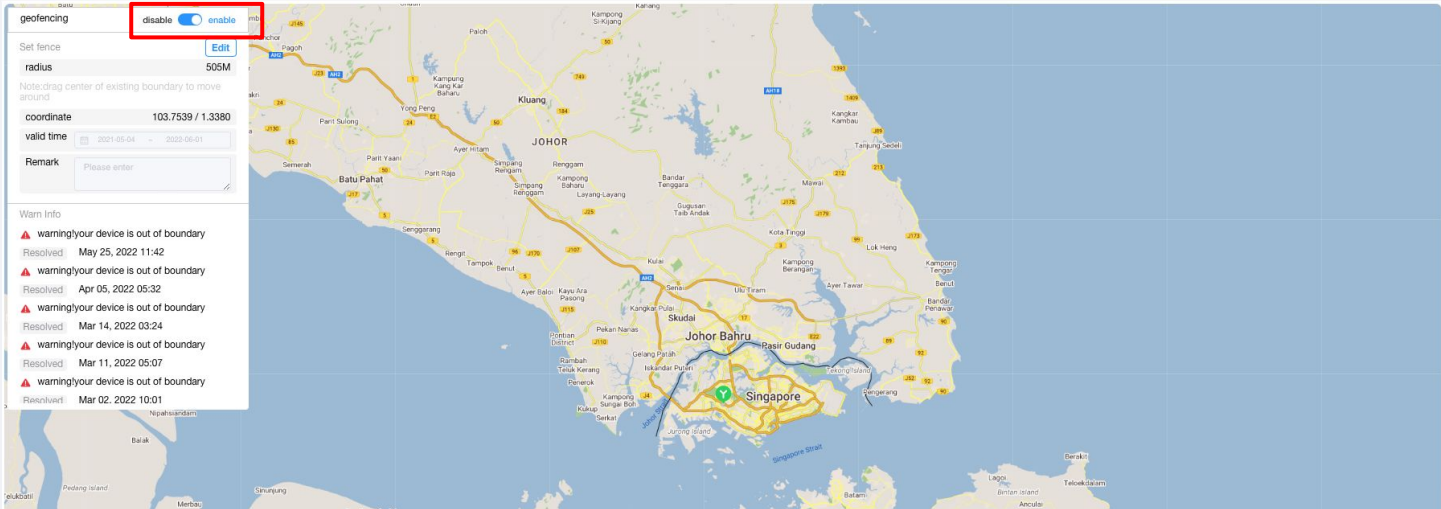
coordinate

valid time -

Remark

Warn Info

- ▲ warning! your device is out of boundary
Resolved May 25, 2022 11:42
- ▲ warning! your device is out of boundary
Resolved Apr 05, 2022 05:32
- ▲ warning! your device is out of boundary
Resolved Mar 14, 2022 03:24
- ▲ warning! your device is out of boundary
Resolved Mar 11, 2022 05:07
- ▲ warning! your device is out of boundary
Resolved Mar 02, 2022 10:01



Warnings

- HOME
- DEVICES
- LOCATION
- LEASE
- WARNING
- REPORT
- FEEDBACK
- SETTING
- Help manual

HOME / WARNING
GemOne v1.6.3

2023-09-16 to 2023-09-22
Owned Company
Site name

Type
Status
Search device name/serial number

Happened	Device Name	Content	Status	Solved at	Owned Company	Alarm duration	Working status	Operation
Sept 22 14:29	B7000A	SOC is as low as 30%, please charge.	Unsolved	--	Industrial Hungary Kft.	25 Min.	Discharging	⌵
Sept 22 13:58	B7000A	SOC is as low as 28%, please charge.	Resolved	Sept 22 14:13	Industrial Hungary Kft.	14 Min.	Idle	⌵
Sept 22 13:40	B7000-Test-01	Temperature has reached 55°C, please cool down before use. (Level 2 warning)	Unsolved	--	Industrial Access Controls	1 Hr. 15 Min.	Discharging	⌵
Sept 22 12:20	B7000-Test-01	Temperature has reached 50°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 13:40	Industrial Access Controls	1 Hr. 20 Min.	Discharging	⌵
Sept 22 11:55	B7000-Test-01	Temperature has reached 50°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 12:06	Industrial Access Controls	11 Min.	Discharging	⌵
Sept 22 11:13	B7000-Test-01	Temperature has reached 50°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 11:23	Industrial Access Controls	9 Min.	Discharging	⌵
Sept 22 06:16	B7000-Test-01	Temperature has reached 54°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 10:55	Industrial Access Controls	4 Hr. 39 Min.	Idle	⌵
Sept 22 05:20	B7000-Test-01	Temperature has reached 55°C, please cool down before use. (Level 2 warning)	Resolved	Sept 22 06:16	Industrial Access Controls	55 Min.	Charging	⌵
Sept 22 04:17	B7000-Test-01	Temperature has reached 55°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 05:20	Industrial Access Controls	1 Hr. 2 Min.	Idle	⌵

Total 125
10/page
1 2 3 4 5 6 ... 13
Go to 1

Warnings

- HOME
- DEVICES
- LOCATION
- LEASE
- WARNING**
- REPORT
- FEEDBACK
- SETTING
- Help manual

HOME / WARNING

2023-09-16 to 2023-09-22 Owned Company Site name

Type Status Search device name/serial number

Happened	Device Name	Content	Status	Solved at	Owned Company	Alarm duration	Working status	Operation
Sept 22 14:29	U1836	SOC is as low as 30%, please charge.	Unsolved	--	Industrial Hungary Kft.	25 Min.	Discharging	🔍
Sept 22 13:58	U1836	SOC is as low as 28%, please charge.	Resolved	Sept 22 14:13	Industrial Hungary Kft.	14 Min.	Idle	🔍
Sept 22 13:40	U1836 Test 01	Temperature has reached 55°C, please cool down before use. (Level 2 warning)	Unsolved	--	Industrial Access Controls	1 Hr. 15 Min.	Discharging	🔍
Sept 22 12:20	U1836 Test 01	Temperature has reached 50°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 13:40	Industrial Access Controls	1 Hr. 20 Min.	Discharging	🔍
Sept 22 11:55	U1836 Test 01	Temperature has reached 50°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 12:06	Industrial Access Controls	11 Min.	Discharging	🔍
Sept 22 11:13	U1836 Test 01	Temperature has reached 50°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 11:23	Industrial Access Controls	9 Min.	Discharging	🔍
Sept 22 06:16	U1836 Test 01	Temperature has reached 54°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 10:55	Industrial Access Controls	4 Hr. 39 Min.	Idle	🔍
Sept 22 05:20	U1836 Test 01	Temperature has reached 55°C, please cool down before use. (Level 2 warning)	Resolved	Sept 22 06:16	Industrial Access Controls	55 Min.	Charging	🔍
Sept 22 04:17	U1836 Test 01	Temperature has reached 55°C, please cool down before use. (Level 1 warning)	Resolved	Sept 22 05:20	Industrial Access Controls	1 Hr. 2 Min.	Idle	🔍

Total 125 10/page 1 2 3 4 5 6 ... 13 > Go to 1

Warnings

HOME / WARNING

2023-09-16 to 2023-09-22 Owned Company Site name

Remain Added today Solved today

Solved at

Owned Company

Device Name

Content: SOC is as low as 30%, please charge.

Status: Unsolved

Remark: Unsolved, Resolved

Alarm duration	Working status	Operation
35 Min.	Discharging	
14 Min.	Idle	
1 Hr. 15 Min.	Discharging	
1 Hr. 20 Min.	Discharging	
11 Min.	Discharging	
9 Min.	Discharging	
4 Hr. 39 Min.	Idle	
55 Min.	Charging	
1 Hr. 2 Min.	Idle	

Total 125 10/page 1 2 3 4 5 6 ... 13 Go to 1

Warnings - warning settings

The dashboard displays the following information:

- Navigation:** HOME, DEVICES / DETAIL (highlighted), LOCATION, LEASE, WARNING, REPORT, FEEDBACK, SETTING, Help manual.
- Device Overview:** Common/Flooded 225Ah. SOH Excellent. 74.3% (74.3% Charged, 25.7% Discharged).
- DC SYSTEM:**
 - SOC: 98% (CHARGING)
 - Voltages: 56.08 V, 27.91 V, 28.17 V
 - Currents: 7.01 V, 6.98 V, 7.04 V
 - Temperature: 27.17 A, 26 °C, Normal
 - Buttons: enable, disable
- Warning Settings:** Low SOC, Low voltage, High temperature, Overdischarge, SOH low, Half voltage imbalance, Out of setting area, Hardware malfunction.
- Device Log:** No data.
- Map:** GPS Only, Map, Satellite. Location: Hortobágy Nemzeti Park.
- Device Details (11026A):** SN:0122433984, GENIE/Scissor/GS-4069A, System Voltage: 48 V, Firmware Version: V109, Setup Time: Sept 14, 2023, Monitored duration: 7 Days, Ignition ON-Time: 1 Hr: 38 Min. (98 Min.), Hour Meter ON-Time: 34 Min. (34 Min.).

Warnings - warning settings

HOME / WARNING / SETTING

11026A (01224333984) | GENIE / GS-4069A / Common / 225 Ah / 48 V | Firmware Version: V109

Warning settings

Alarm on/off: Off On

SOC: Off On Low value: 30 % Recovery value: 80 %

Temperature: Off On Low temperature: -50 °C Level 1 high temp.: 50 °C Level 2 high temp.: 55 °C Level 3 high temp.: 60 °C
Temp. abnormal: 101 °C

Voltage: Voltage warning off Voltage warning on Low voltage protection off Low voltage protection on Level 1 low voltage: 36.00 V Level 2 low voltage: 41.28 V Level 3 low voltage: 37.92 V
Recovery: 48.00 V High voltage: 71.04 V duration: 15 Second

Half voltage: Off On Half voltage threshold: 100 mV duration: 90 Second

Level: Off On duration: 30 Min.

Network abnormality: Off On Warning value is greater than: 168 Hr.

Current: Charging overcurrent Charging overcurrent on Discharge overcurrent Discharge overcurrent on Charging overcurrent: 225 A Discharge overcurrent: 450 A
duration: 15 Second

Temporary overcharging warning: Off On Number of times: 10

Charge-discharge ratio warning: Off On Charge-discharge ratio warning threshold(%): 200

Vehicle periodic maintenance: Off On every month: 1 Day
Battery: Off On Maintenance method: Periodic maintenance every month: 1 Day

Warnings - notification recipients

HOME / WARNING / SETTING

11026A (01224333984) | GENIE / GS-4069A / Common / 225 Ah / 48 V | Firmware Version: V109

Temporary overcharging warning: Off On Number of times: 10

Charge-discharge ratio warning: Off On Charge-discharge ratio warning threshold(%): 200

Vehicle periodic maintenance: Off On every month 1 Day

Battery maintenance: Off On Maintenance method: Periodic maintenance every month 1 Day

Subscribe to news: Please select

Message recipient: Kasule Darin, Brinye Cuaba, Toh, Banabas

Submit

Warning message [delete all](#)

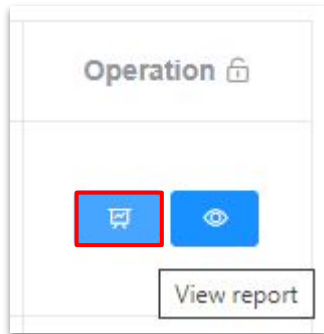
Content	Status	Solved at	Remark	Operation
The charge-discharge ratio is abnormal, please use the battery reasonably	Unsolved	--		Z

Total 1 10/page < 1 > Go to 1

Reports

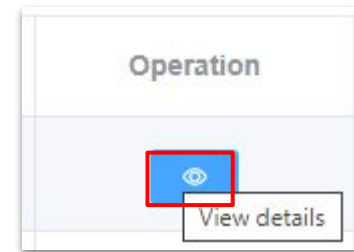
Navigation method 1

- Via devices tab in navigation bar
 - Reports per BMS device



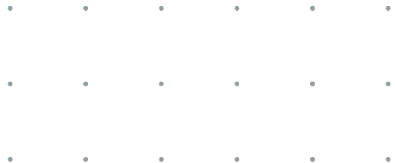
Navigation method 2

- Via report tab in navigation bar
 - Overview of BMS devices
 - Report per BMS device



Reports

- Charge and discharge cycles (bar chart)
- Charge and discharge cycles (table)
- Warning messages
- Daily statistics (table)
 - Date
 - Daily work hour
 - Machine used duration
 - Discharged (Ah)
 - Discharged (kWh)
 - Charged duration
 - Charged (Ah)
 - Charged (kWh)
 - Minimum SOC
 - Minimum Voltage
 - Maximum temperature








Reports

HOME / REPORT

Owned Company Search device name/serial number

Battery Monitor Lithium Battery

Device Name	Time selection	Total charged	Total discharged	Added warning	Operation
GEM-Test-02	Week50: Dec 04, 2022-Dec 11, 2022	--	--	--	
GEM-Test-06	Week50: Dec 04, 2022-Dec 11, 2022	--	--	--	
GEM-Test-05	Week50: Dec 04, 2022-Dec 11, 2022	--	--	--	
GEM-Test-03	Week50: Dec 04, 2022-Dec 11, 2022	--	--	--	
GEM-Test-01	Week50: Dec 04, 2022-Dec 11, 2022	--	--	--	

Total 5 10/page 1 Go to 1

View details

REPORT

HOME

DEVICES

LOCATION

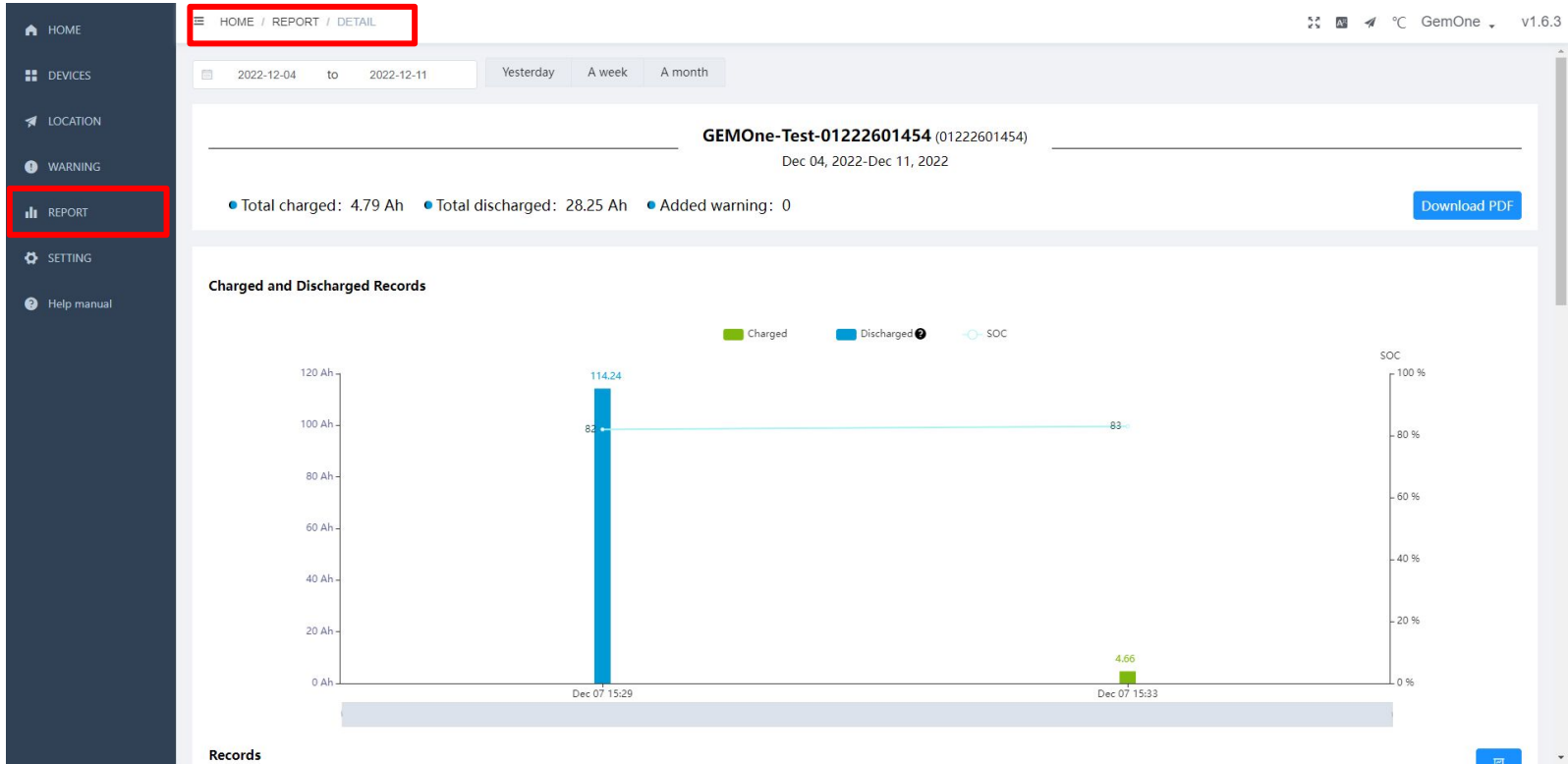
WARNING

SETTING

Help manual

GEM-Waregem v1.6.3

Reports



E-mail notifications

General

- Any user of a branch company, regardless of role, can add or remove existing platform users as recipients in the specific warning settings page of the device within the own branch company
- Any user of a parent company, regardless of role, can add or remove existing platform users as recipients in the specific warning settings page of the device for all its branch companies
- Recipients of alerts from branch company A can be added as recipients of alerts in branch company B

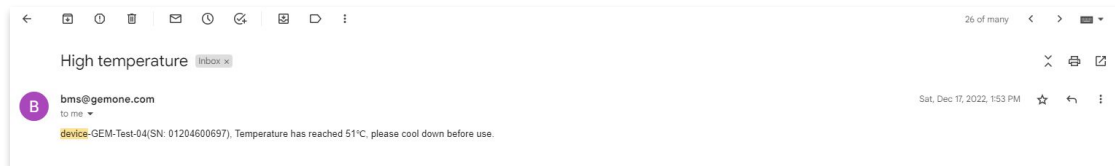
E-mail notifications

Warnings

- Warning settings can be adjusted by navigating to the device page and clicking on the warning settings button (see slide 23)
- For every individual alert, an email notification is sent to one or more recipients (1 alert from 1 device = 1 email notification)
- The email notification stops when the warning has been resolved

Reports

- Currently, the BMS platform does not have the functionality to send a global, single report for one or more devices



Battery replacement process

HOME / DEVICES / DETAIL

HOME

DEVICES

LOCATION

LEASE

WARNING

REPORT

FEEDBACK

SETTING

Help manual

Common/Flooded 225Ah

SOH Excellent

AH | KWH

Charged

Discharged

74.3%

11026A

SN:0122433984

GENIE/Scissor/GS-4069A

System Voltage: 48 V

Setup Time: Sept 14, 2023

Monitored duration: 7 Days

Ignition ON-Time: 1 Hr: 38 Min. (98 Min.)

Hour Meter ON-Time: 34 Min. (34 Min.)

A Moment Ago

Overdischarge

Hardware malfunction

GPS Only Map Satellite

Dune-poly Nemzezi Park

Google

* SN: 01204600739

Model: Common/Flooded

Capacity: 200

Machine Brand: OTHER

Machine Model: OTHER

* Number of cell: 12

battery SN: battery SN

Positioning: disable enable

Show Ignition: disable enable

* Device Name: GEM-Test-02

System Voltage: 24

Owned Company: GEM-Waregem

Setup Time: Feb 17, 2021

Site name: GEM-HQ

Full charge time: 15 Min.

Remaining available time: disable enable

Half voltage: disable enable

Cancel Submit

Battery replacement process

HOME / DEVICES

Map Satellite

Graphical Description

- abnormal
- normal

Keyboard shortcuts Map data ©2023 Google Terms Report a map error

Calibrate

SN 01224333984

Model **Common/Plowed**

Capacity 225

CAN 0 YHUB

APN m2mintpry.prosimus.be

Aux current acquisition Off On

Remote control No Yes

Baud rate 125K 250K 500K

LED indicator Yes No

Sensor type SHUNT HALL Forward Reverse 300A

Track Off On

Sampling algorithm Dynamic sampling 300 mV Static sampling

GPS function Fully turn on GPS Turn off GPS completely Start GPS every 2h

Network features Fully open the network Start the network once a day Start the network every 2h

Device Name 11026A

Type C5 C20 C6

System Voltage 48

Level sensor Yes No

RS485 communication Off On

Aux voltage acquisition Off On

Hardware voltage level High voltage version Non-high voltage version

Node ID 85

reset function **start reset**

Cancel Submit

Operation

Calibrate

Battery replacement process

HOME / DEVICES

Map Satellite

Graphical Description

- abnormal
- normal

Keyboard shortcuts Map data ©2023 Google Terms Report a map error

Advance **Calibrate**

SOC : 97% [Set up](#) Voltage : 51.37 V [Set up](#) [Calibration reset](#)

Aux voltage acquisition : 25.66 V [Set up](#) Current : 0 A [Set zero](#)

Aux current acquisition : 0.00 A [Set zero](#)

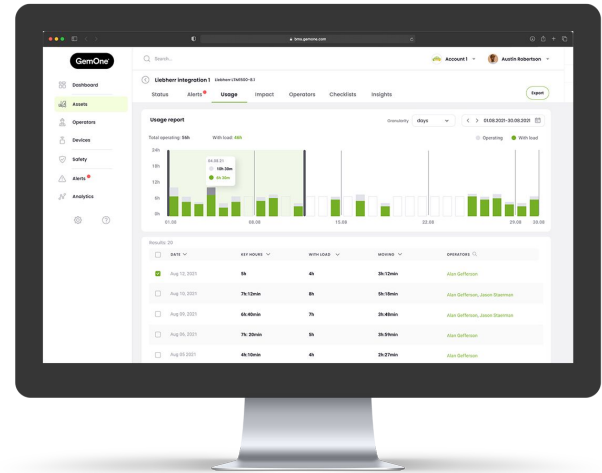
17653A	Sept 11, 2023	11 Days ago	mateco-Hungary Kft.	V109	SOC 77%	Voltage 49.73V	Level Normal	Temperature 26 °C	A Moment Ago
OP1	Sept 08, 2023	13 Days ago	Superior Beverage Group	V109	SOC 78%	Voltage 24.19V	Level Normal	Temperature 37 °C	A Moment Ago
26383	Sept 05, 2023	16 Days ago	FilmTec (Dupont)	V888	SOC 77%	Voltage 36.92V	Level Normal	Temperature 39 °C	7 Min. ago
17919A	Sept 05, 2023	17 Days ago	matec	V109	SOC 95%	Voltage 51.06V	Level Normal	Temperature 26 °C	6 Min. ago
26381	Sept 02, 2023	20 Days ago	FilmTec (Dupont)	V888	SOC 59%	Voltage 36.8V	Level Normal	Temperature 30 °C	A Moment Ago

Operation

Integration of BMS devices in GemOne Cloud platform

- **Why?**

Integration of BMS telematics data allows users to view basic telematics data from BMS, eliminating the need to navigate to multiple platforms to view the data.





GemOne®

Q&A

Q&A

What happens when we move device from one branch to another? Is there migration of data?

When moving a BMS device from one branch to another, the historical data will be moved along with it as well.

What roles do my colleagues and I have currently?

User Name	User Role
	General
	General
	General
	General
	General

Q&A

What is the process for claiming a device on another asset?

Step 1: Unbind ('unclaim') the BMS device by navigating to Devices > Operation > Unbind device

ATTENTION: this will also remove all historical data!

The screenshot shows the GemOne web interface. The main dashboard includes a map, a search bar, and a table of devices. The table has columns for Device Name, Setup Time, Monitored duration, Owned Company, Firmware Version, Realtime Data, Latest Update, and Operation. A red box highlights the 'Unbind device' button in the Operation column for the device with ID 111026A. An inset window shows a confirmation dialog 'Are you sure to unbind?' with 'Cancel' and 'Confirm' buttons. Another inset window shows the device details for 'GEM-TEST-02'.

Device Name	Setup Time	Monitored duration	Owned Company	Firmware Version	Realtime Data	Latest Update	Operation
111026A	Sept 14, 2023	8 Days ago	mateco-Hungary Kft.	V109	SOC 95% Voltage 50.79V Level Normal Temperature 27 °C	7 Min. ago	[Unbind device]

Realtime Data: SOC 95%, Voltage 50.79V, Level Normal, Temperature 27 °C

Latest Update: 7 Min. ago

Operation: [Unbind device]

Confirmation Dialog: Are you sure to unbind? [Cancel] [Confirm]

Device Details: GEM-TEST-02, SN 01210604738, OTHER/OTHER/OTHER, System Voltage: 48 V, Firmware Version: V220, Setup Time: June 09, 2021, Monitored duration: 574 Days

Step 2: Claim the device again as demonstrated on page 13, 14 and 15

Q&A

Are there limitations on how many users can be created per parent company / branch company?

There are no limitations on the number of users that can be created.

Do you have to calibrate immediately after the installation or can you calibrate at any given time?

Calibration can be done at any given time, but preferably, this happens soon after the BMS device is installed.