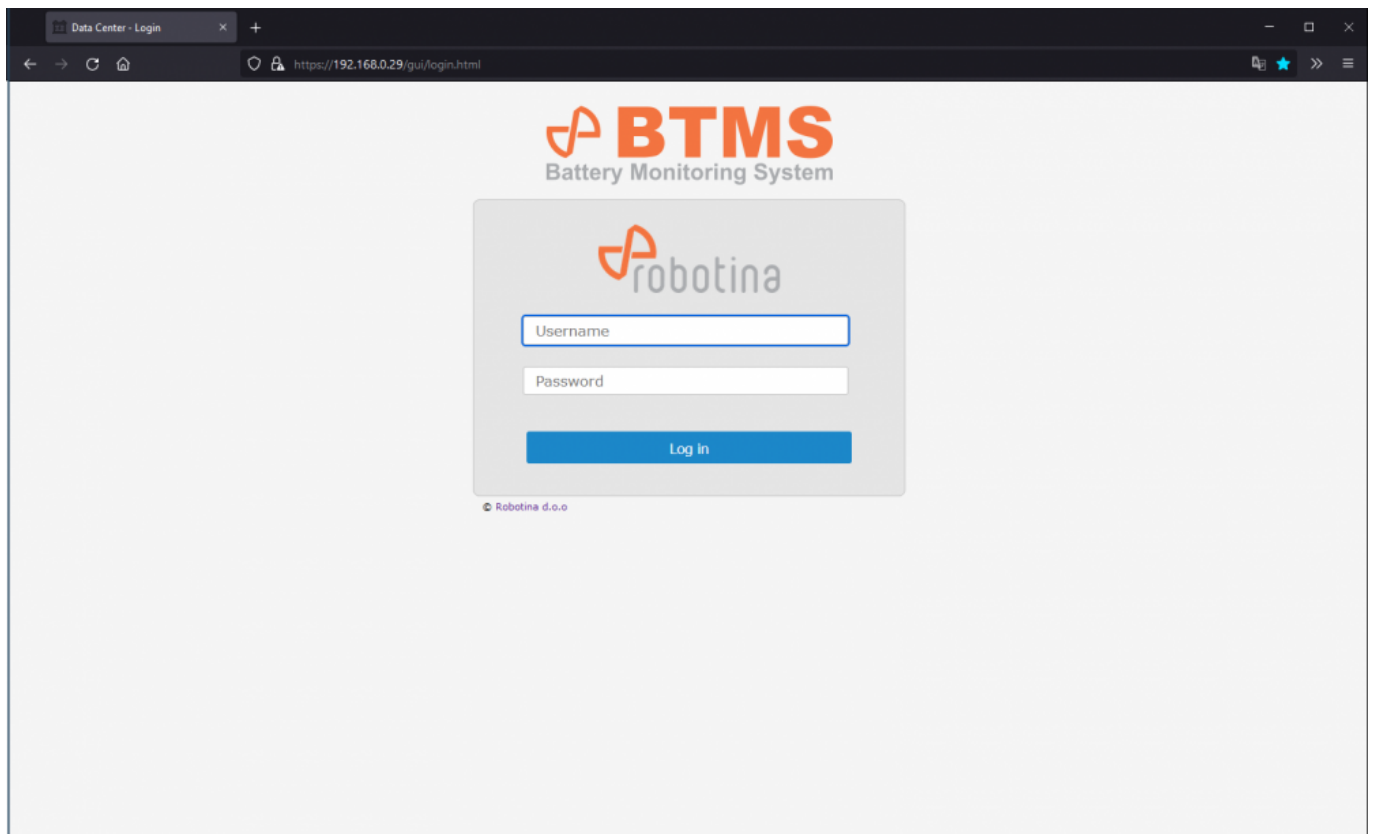


BM-GW WEB UI

- Demo: [BTMS BM-GW WEB UI demo](#)
- User: demo
- Pass: demo

Log-in



1st time log in:

- Connect Ethernet 2 port to facility LAN
- Connect PC to Ethernet 1 port (standard Ethernet cable between PC and BM-GW Ethernet 1 port)
- For PC Ethernet connection set fixed IP 192.168.10.200.
- Use the Internet browser to go to <https://192.168.10.1>
- Log in as:
 - user: admin
 - password: bmgw!admin
- Check the WAN IP address on the Data center - Settings page and set it if necessary

Network settings

Adapter	Mode	IP	Subnet	Gateway	DNS
LAN	fixed	192.168.10.1	255.255.255.0		
WAN	fixed	192.168.0.29	255.255.255.0	192.168.0.2	192.168.0.41, 192.168.0.71

NTP settings

Custom NTP

Host	Port	Enabled
		☒

Default NTP pools (ENABLED)

Host
ntp.ubuntu.com
0.ubuntu.pool.ntp.org
1.ubuntu.pool.ntp.org
2.ubuntu.pool.ntp.org

Time settings

- Connect the PC to the facility LAN and go to the <https://IP> address of the WAN port

General description

Real-time data

UPS	Status	Voltage	Current	SoC
#01	OK	217.89 V	0.00 A	100 %

Voltage

HIGH

LOW

0

#01

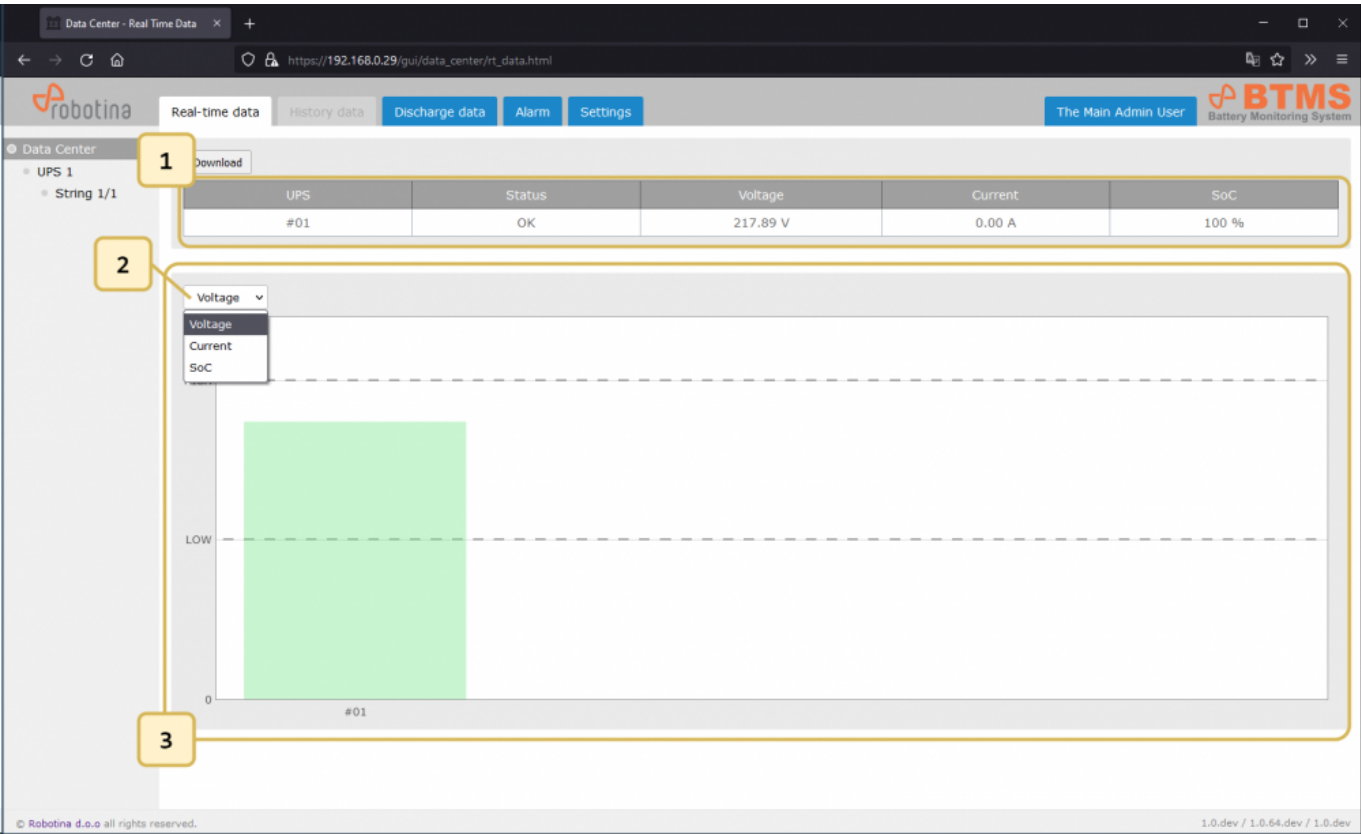
1

Pages tabs

2	Data center tree structure
3	Page data

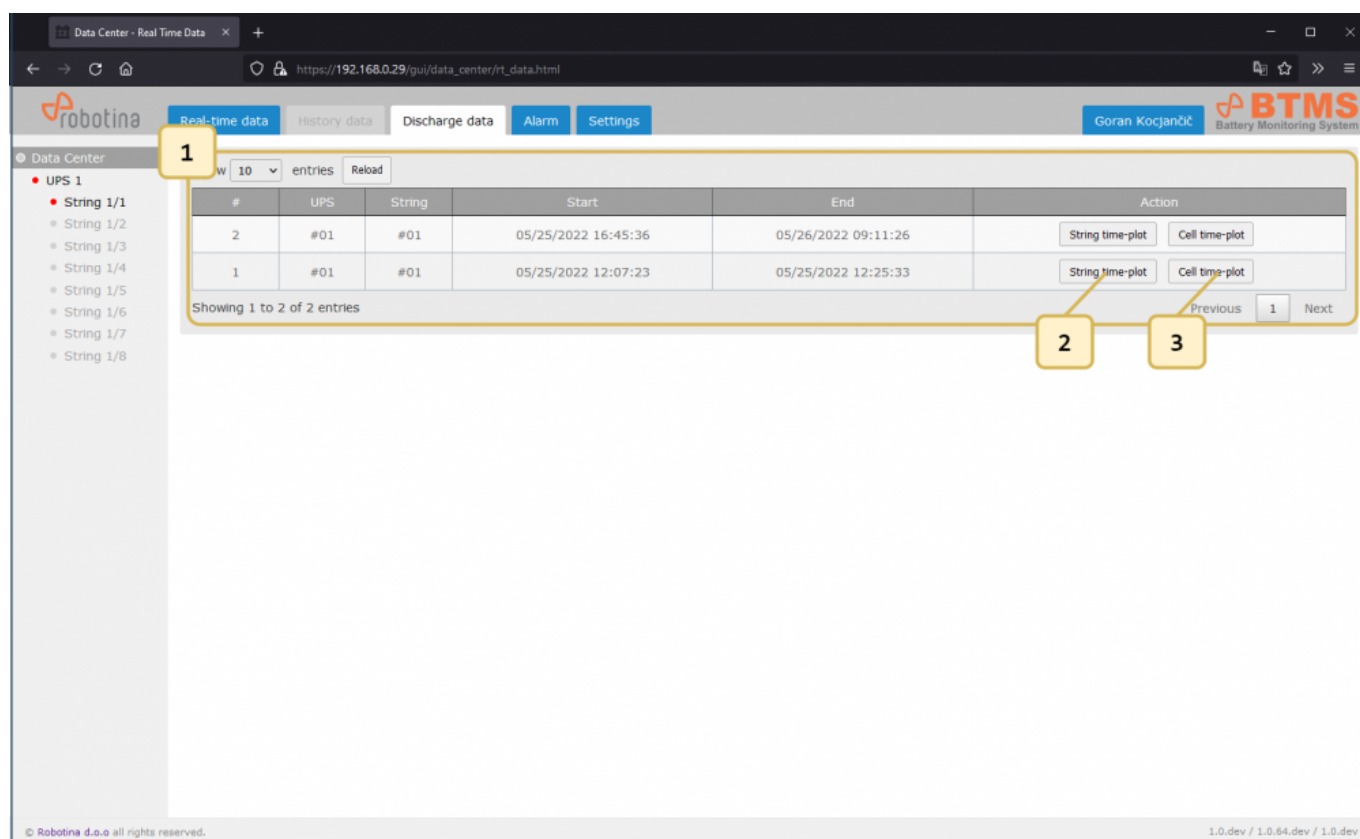
Data center

Real-time data



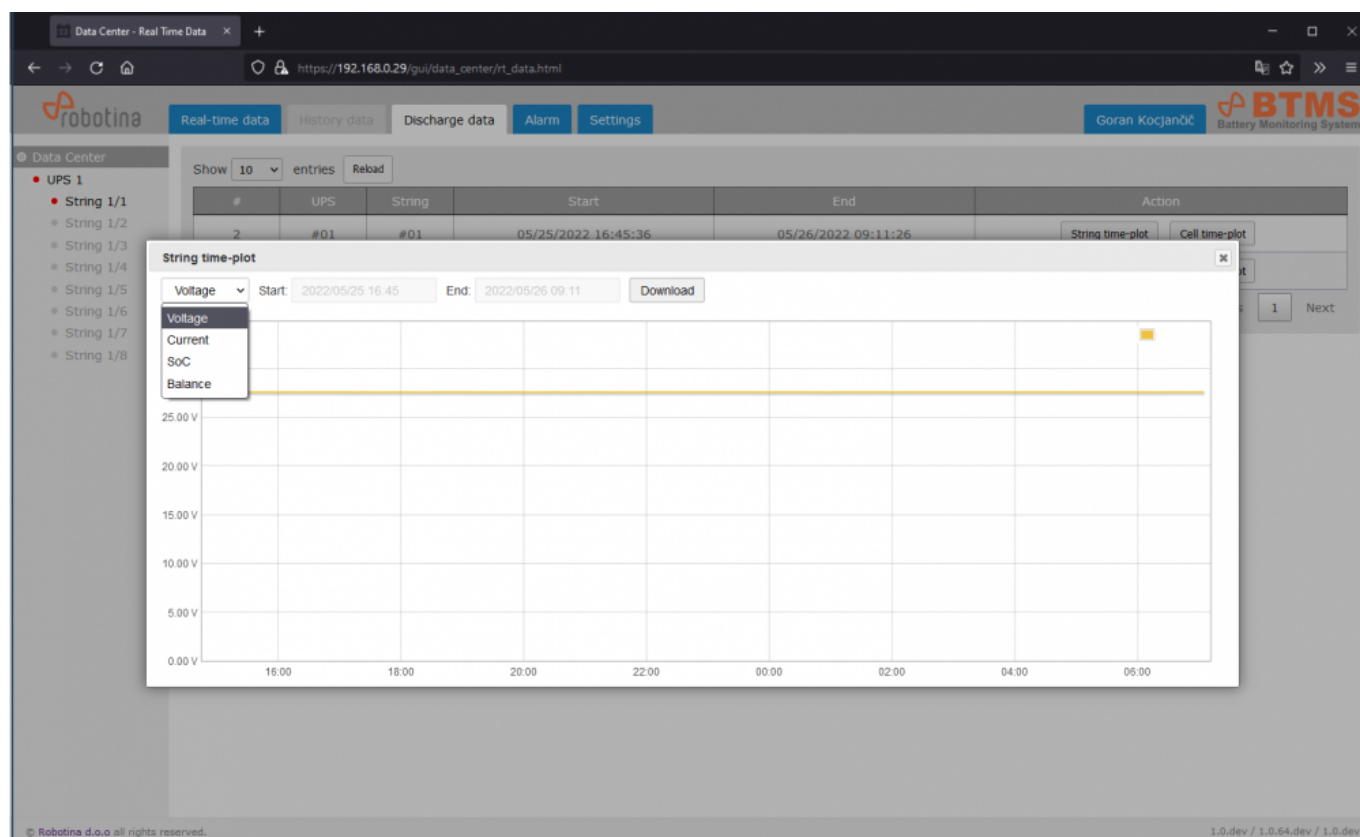
1	Tabular display of data for the Data Center
2	Select a parameter for the graphic display
3	Graphic bar-graph data display for the data center

Discharge data

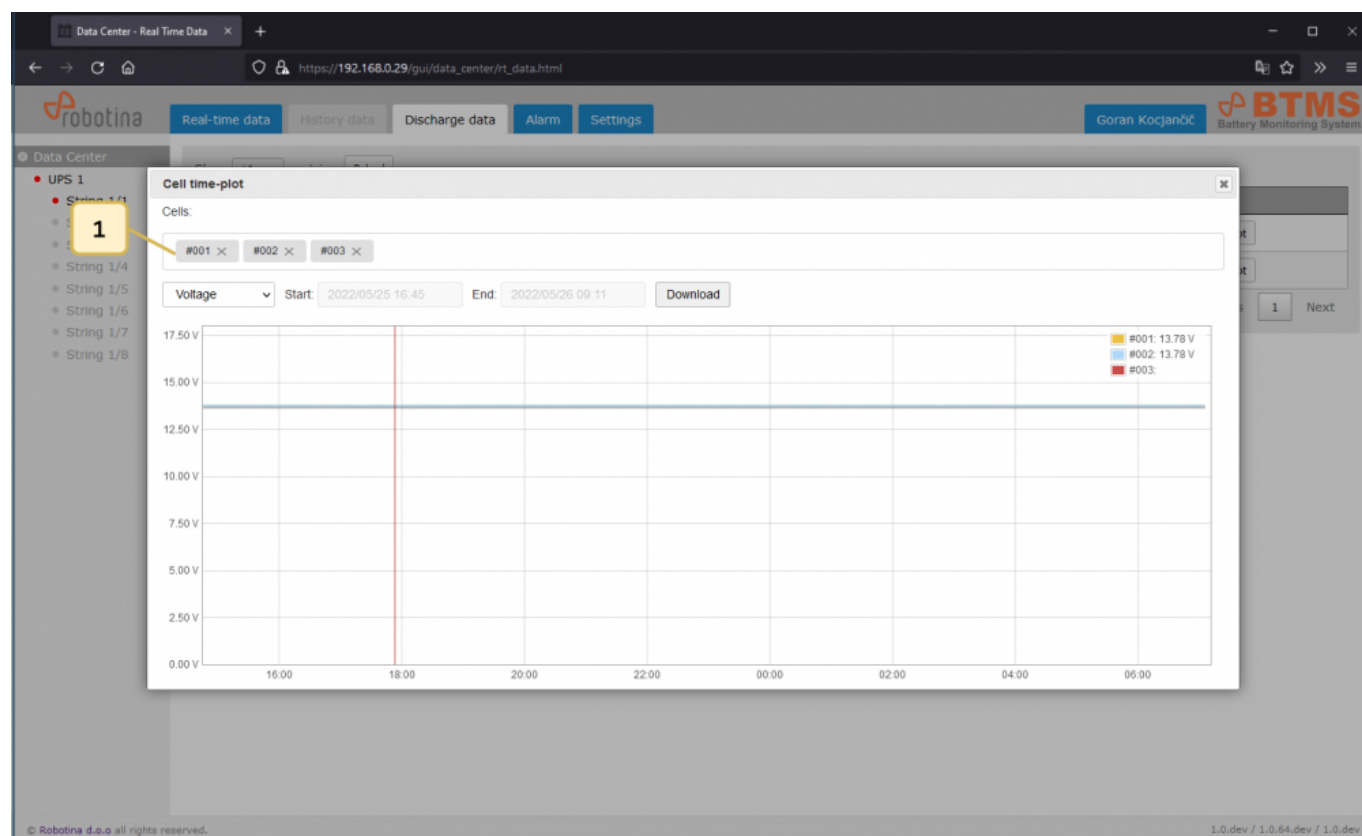


- | | |
|---|--------------------------------------|
| 1 | Discharge events table |
| 2 | String time-plot for discharge event |
| 3 | Cell time-plot for discharge event |

String time-plot for discharge event



Cell time-plot for discharge event



1

Cell selection

Alarm

The screenshot shows the 'Alarms' window in the Robotina BTMS interface. The window title is 'Data Center - Alarms'. Below the title, there are tabs for 'Real-time data', 'History data', 'Discharge data', 'Alarm', and 'Settings'. The selected tab is 'Alarm'. The window displays a table of alarm events. The table has columns: #, UPS, String, Cell, From, To, Alarm, and Status. The table shows 14 entries. A yellow box highlights the table, and a yellow circle with the number 1 is next to the 'Alarms' tab. A yellow circle with the number 2 is next to the 'Showing 1 to 10 of 14 entries' text.

#	UPS	String	Cell	From	To	Alarm	Status
14	#01	#01	#001	06/07/2022 14:22:20		Temperature high	active
13	#01	#01		06/06/2022 13:35:56	06/06/2022 13:38:24	Current low (discharging)	gone
12	#01	#01		06/06/2022 13:29:16	06/06/2022 13:38:24	Current high (charging)	gone
11	#01	#01		06/06/2022 13:14:48	06/06/2022 13:28:41	Voltage low	gone
10	#01	#01		06/06/2022 13:14:48	06/06/2022 13:28:41	Voltage high	gone
9	#01	#01		06/06/2022 13:14:48	06/06/2022 13:28:41	Current low (discharging)	gone
8	#01	#01		06/06/2022 13:14:48	06/06/2022 13:28:41	Current high (charging)	gone
7	#01	#01		06/06/2022 13:00:19	06/06/2022 13:00:51	Voltage low	gone
6	#01	#01		06/06/2022 12:43:25	06/06/2022 13:00:51	Voltage high	gone
5	#01	#01		06/06/2022 12:43:25	06/06/2022 13:00:51	Current low (discharging)	gone

Showing 1 to 10 of 14 entries

1	Alarms sub-page selection
2	Alarms table

E-mails

The screenshot displays the 'Data Center - Sent E-mails' page. The top navigation bar includes tabs for 'Real-time data', 'History data', 'Discharge data', 'Alarm', and 'Settings'. The user is logged in as 'The Main Admin User'. The left sidebar shows the 'Data Center' structure with 'UPS 1' and 'String 1/1' selected. The main content area has tabs for 'Alarms', 'E-mails', and 'SMS'. The 'E-mails' tab is active, showing a table of sent emails. The table has columns: '#', 'UPS', 'String', 'Cell', 'Alarm', 'Time', 'Contact', 'Status', and 'Error'. There are 6 entries, all with a status of 'failed'. The error messages indicate SMTP server configuration issues and connection timeouts. The interface also includes a 'Show' dropdown set to '10 entries', 'Reload', and 'Download' buttons. The bottom of the table shows 'Showing 1 to 6 of 6 entries' and navigation buttons for 'Previous', '1', and 'Next'.

#	UPS	String	Cell	Alarm	Time	Contact	Status	Error
6	#01	#01		current low (discharging)	06/06/2022 13:40:49	The Main Admin User / razvoj@3-port.si	failed	SMTP server not configured
5	#01	#01		current low (discharging)	06/06/2022 13:40:39	Uroš Marušič / uros.marusic@3-port.si	failed	Couldn't connect to host, port: localhost, 25; timeout -1
4	#01	#01		3 events from 2022-06-06T13:14:48+02:00 to 2022-06-06T13:29:16+02:00	06/06/2022 13:32:05	The Main Admin User / razvoj@3-port.si	failed	Couldn't connect to host, port: localhost, 25; timeout -1
3	#01	#01		3 events from 2022-06-06T13:14:48+02:00 to 2022-06-06T13:29:16+02:00	06/06/2022 13:32:05	Uroš Marušič / uros.marusic@3-port.si	failed	Couldn't connect to host, port: localhost, 25; timeout -1
2	#01	#01		3 events from 2022-06-06T13:00:51+02:00 to 2022-06-06T13:14:48+02:00	06/06/2022 13:17:06	The Main Admin User / razvoj@3-port.si	failed	Couldn't connect to host, port: localhost, 25; timeout -1
1	#01	#01		3 events from 2022-06-06T13:00:51+02:00 to 2022-06-06T13:14:48+02:00	06/06/2022 13:17:05	Uroš Marušič / uros.marusic@3-port.si	failed	Couldn't connect to host, port: localhost, 25; timeout -1

Showing 1 to 6 of 6 entries

Previous 1 Next

SMS

The screenshot shows the 'Data Center - Sent SMS' interface. The top navigation bar includes 'Real-time data', 'History data', 'Discharge data', 'Alarm', and 'Settings'. The 'Alarm' tab is selected. The left sidebar shows 'Data Center' > 'UPS 1' > 'String 1/1'. The main content area has tabs for 'Alarms', 'E-mails', and 'SMS', with 'SMS' selected. Below the tabs are 'Show 10 entries', 'Reload', and 'Download' buttons. A table displays 6 entries of SMS events. The footer shows '© Robotina d.o.o. all rights reserved.' and version information '1.0.dev / 1.0.64.dev / 1.0.dev'.

#	UPS	String	Cell	Alarm	Time	Contact	Status	Error
6	#01	#01		2 events from 2022-06-06T13:29:16+02:00 to 2022-06-06T13:38:24+02:00	06/06/2022 13:40:39	Uroš Marušič / uros.marusic@3-port.si	failed	Connection refused (Connection refused)
5	#01	#01		3 events from 2022-06-06T13:14:48+02:00 to 2022-06-06T13:29:16+02:00	06/06/2022 13:32:05	Uroš Marušič / uros.marusic@3-port.si	failed	Connection refused (Connection refused)
4	#01	#01		2 events from 2022-06-06T13:00:51+02:00 to 2022-06-06T13:14:48+02:00	06/06/2022 13:17:06	Uroš Marušič / uros.marusic@3-port.si	failed	Connection refused (Connection refused)
3	#01	#01		2 events from 2022-06-06T12:43:25+02:00 to 2022-06-06T13:00:51+02:00	06/06/2022 13:03:59	Uroš Marušič / uros.marusic@3-port.si	failed	Connection refused (Connection refused)
2	#01	#01		2 events from 2022-06-06T07:38:22Z to 2022-06-06T10:43:25Z	06/06/2022 12:47:57	Uroš Marušič / uros.marusic@3-port.si	failed	Connection refused (Connection refused)
1	#01	#01		2 events from 2022-06-06T07:35:55Z to 2022-06-06T07:38:22Z	06/06/2022 09:42:23	Uroš Marušič / uros.marusic@3-port.si	failed	Connection refused (Connection refused)

Showing 1 to 6 of 6 entries

Settings

Network settings, NTP settings

The screenshot shows the 'Data Center - Settings' interface. The top navigation bar includes 'Real-time data', 'History data', 'Discharge data', 'Alarm', and 'Settings'. The 'Settings' tab is selected. The left sidebar shows 'Data Center' > 'UPS 1' > 'String 1/1'. The main content area has tabs for 'Network settings', 'NTP settings', and 'Time settings'. The 'Network settings' tab is selected, showing an 'Edit' button and a table of network configurations. The 'NTP settings' tab is also visible, showing 'Edit' and 'Sync now' buttons, and sections for 'Custom NTP' and 'Default NTP pools (ENABLED)'. The footer shows '© Robotina d.o.o. all rights reserved.' and version information '1.0.dev / 1.0.64.dev / 1.0.dev'.

Network settings

Edit

Adapter	Mode	IP	Subnet	Gateway	DNS
LAN	fixed	192.168.10.1	255.255.255.0		
WAN	fixed	192.168.0.29	255.255.255.0	192.168.0.2	192.168.0.41, 192.168.0.71

NTP settings

Edit Sync now

Custom NTP

Host	Port	Enabled
		☒

Default NTP pools (ENABLED)

Host
ntp.ubuntu.com
0.ubuntu.pool.ntp.org
1.ubuntu.pool.ntp.org
2.ubuntu.pool.ntp.org

Time settings

Time settings, Users

The screenshot shows the 'Settings' tab in the Robotina BTMS interface. The left sidebar shows the navigation menu with 'Data Center' expanded, showing 'UPS 1' and 'String 1/1'. The main content area is divided into two sections: 'Time settings' and 'Users'.

Time settings

There is an 'Edit' button at the top. Below it is a table with two columns: 'Time' and 'Date'.

Time	Date
18:10:09	06/07/2022

Below the table is another 'Edit' button. Underneath is a 'Timezone' dropdown menu currently set to 'Europe/Ljubljana'.

Users

There are 'Add', 'Edit', and 'Delete' buttons at the top. Below is a table listing users:

User	Full name	Administrator	Phone number	E-mail
admin	The Main Admin User	☒		razvoj@3-port.si
goran	Goran Kocjancic	☒	041379313	goran.kocjancic@robotina.com
devid	Devid Palcic	☒		

Below the Users section is the 'SMTP settings' section, which has an 'Edit' button.

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SNMP settings, SMS notifications, Project settings, Data export

The screenshot shows the 'Settings' tab in the Robotina BTMS interface, specifically the 'SMTP settings' section. The left sidebar is the same as in the previous screenshot.

SMTP settings

There is an 'Edit' button at the top. Below it is a table with five columns: 'Host', 'Port', 'From E-mail', 'Security', and 'Username'.

Host	Port	From E-mail	Security	Username

SMS notifications

There is a 'Test SMS' button. Below it is a message: 'Your user does not have an associated phone number.'

Project settings

There are 'Edit' and 'Delete logo' buttons at the top. Below is a table with four columns: 'Project name', 'Company', 'URL', and 'Owner'.

Project name	Company	URL	Owner

Data Export

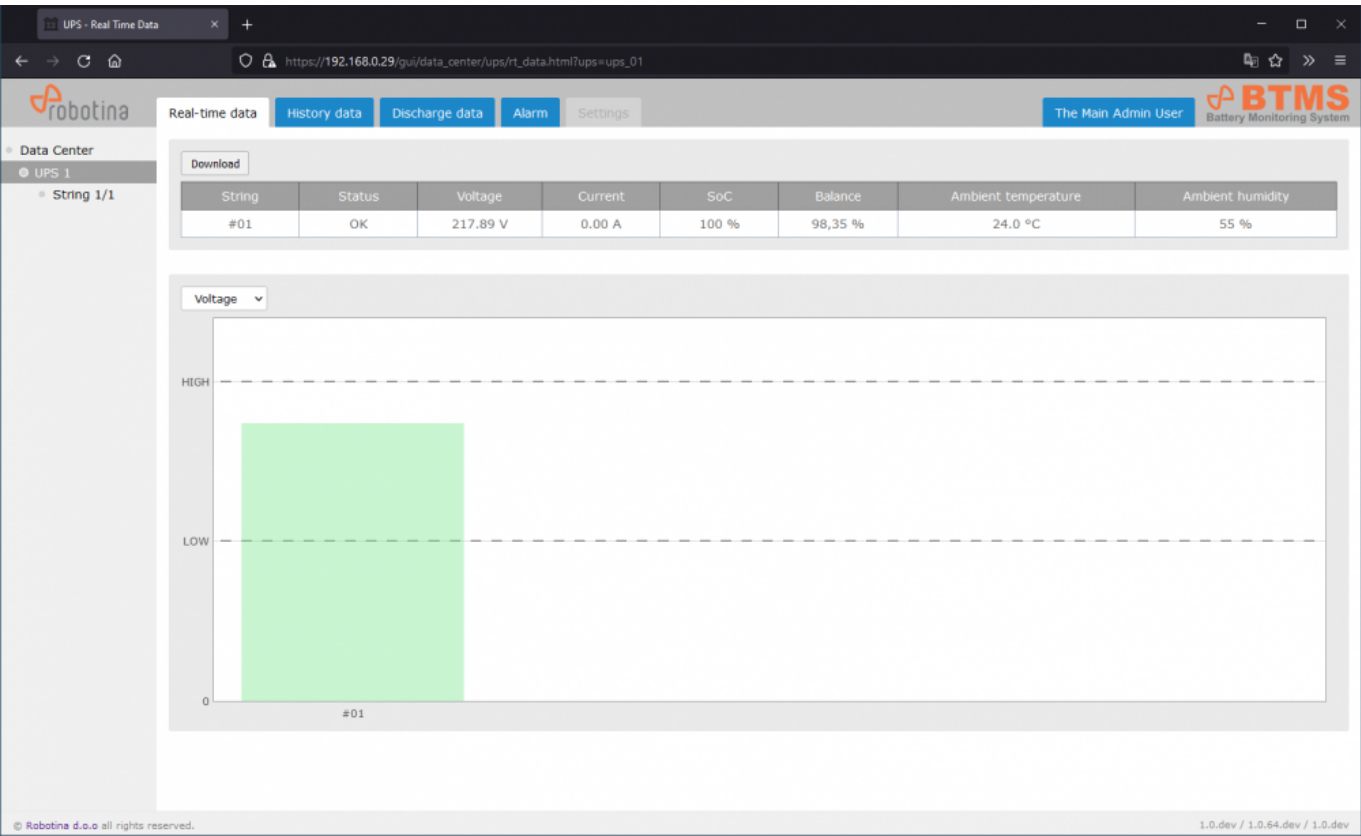
There is a 'New data export' button. Below it is a table with three columns: 'File', 'Size', and 'Time'.

File	Size	Time
No data exports available		

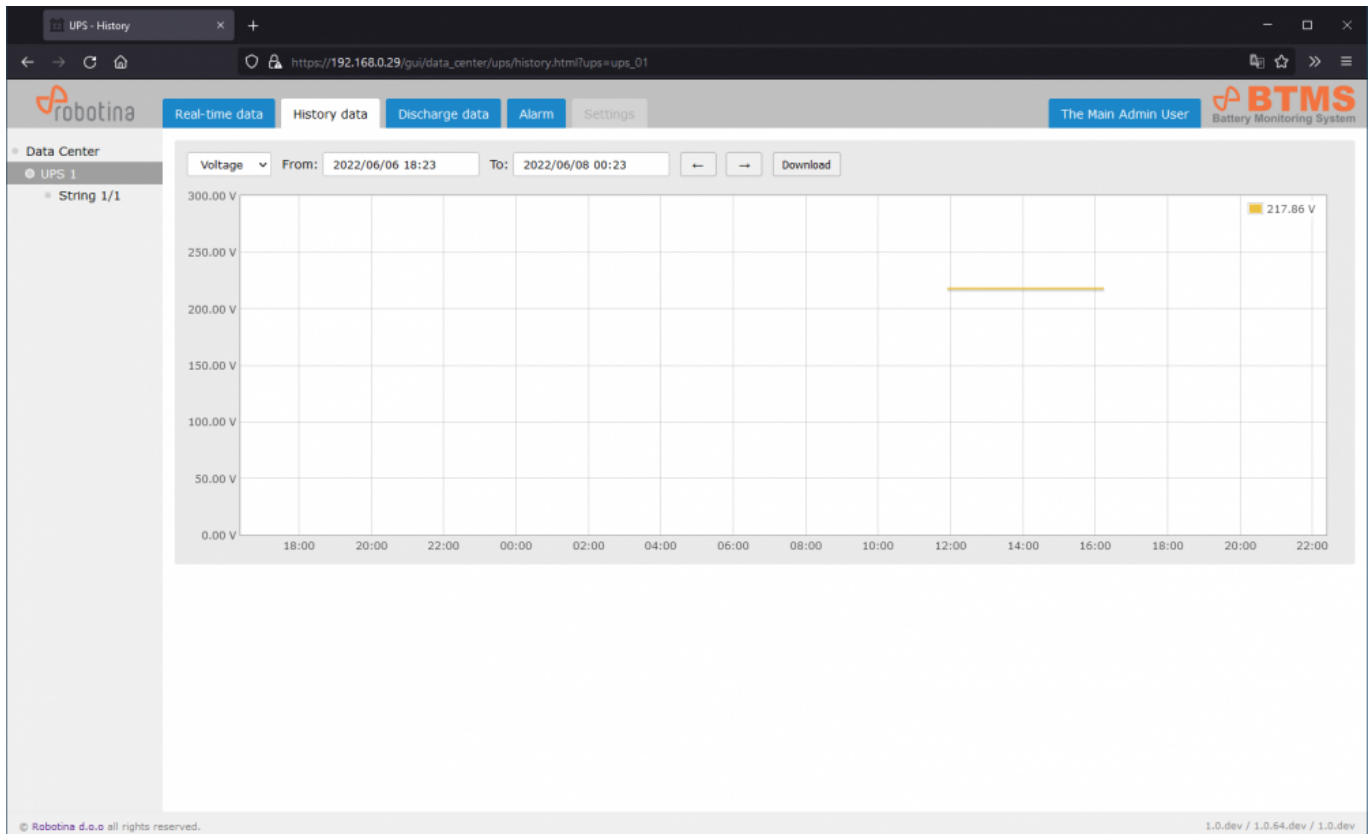
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UPS

Real-time data



History data

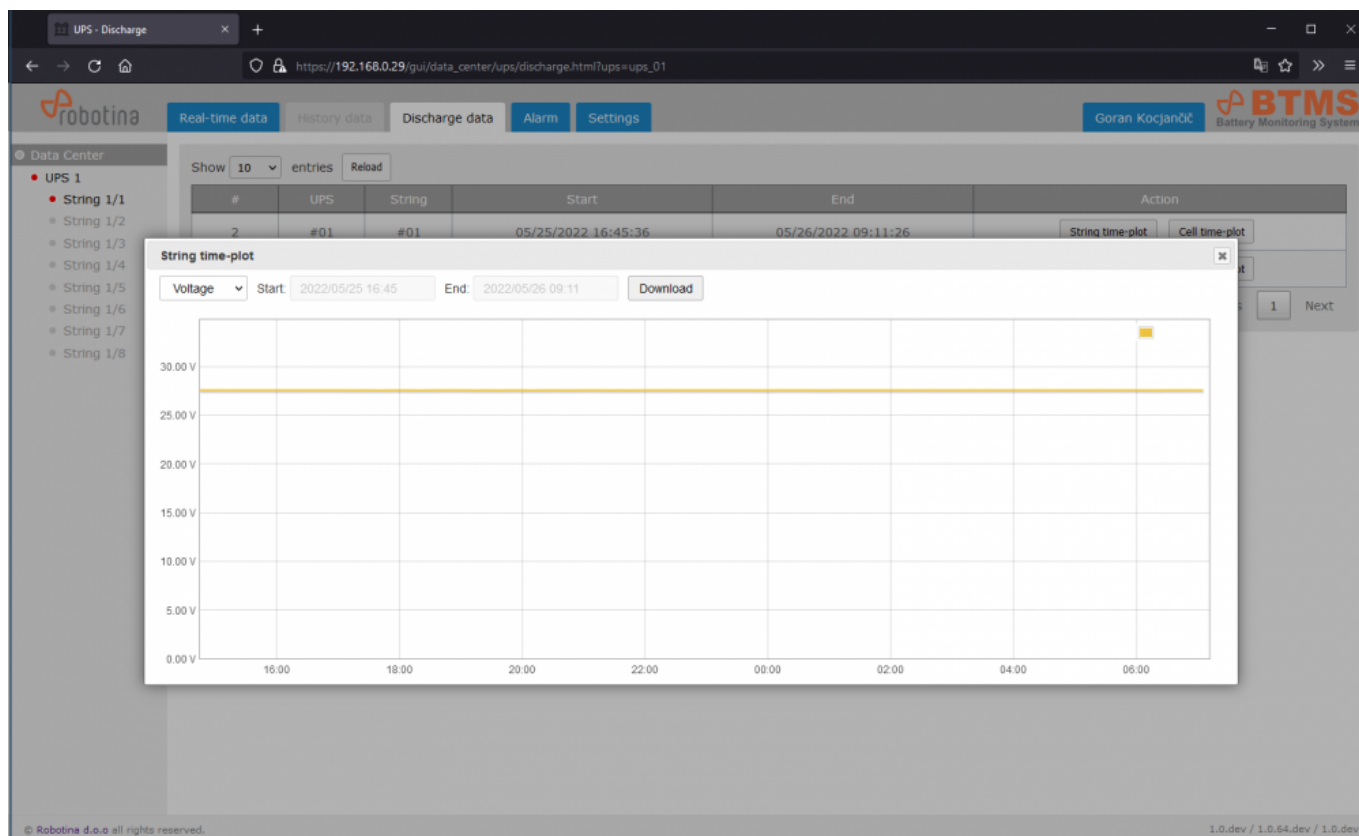


Discharge data

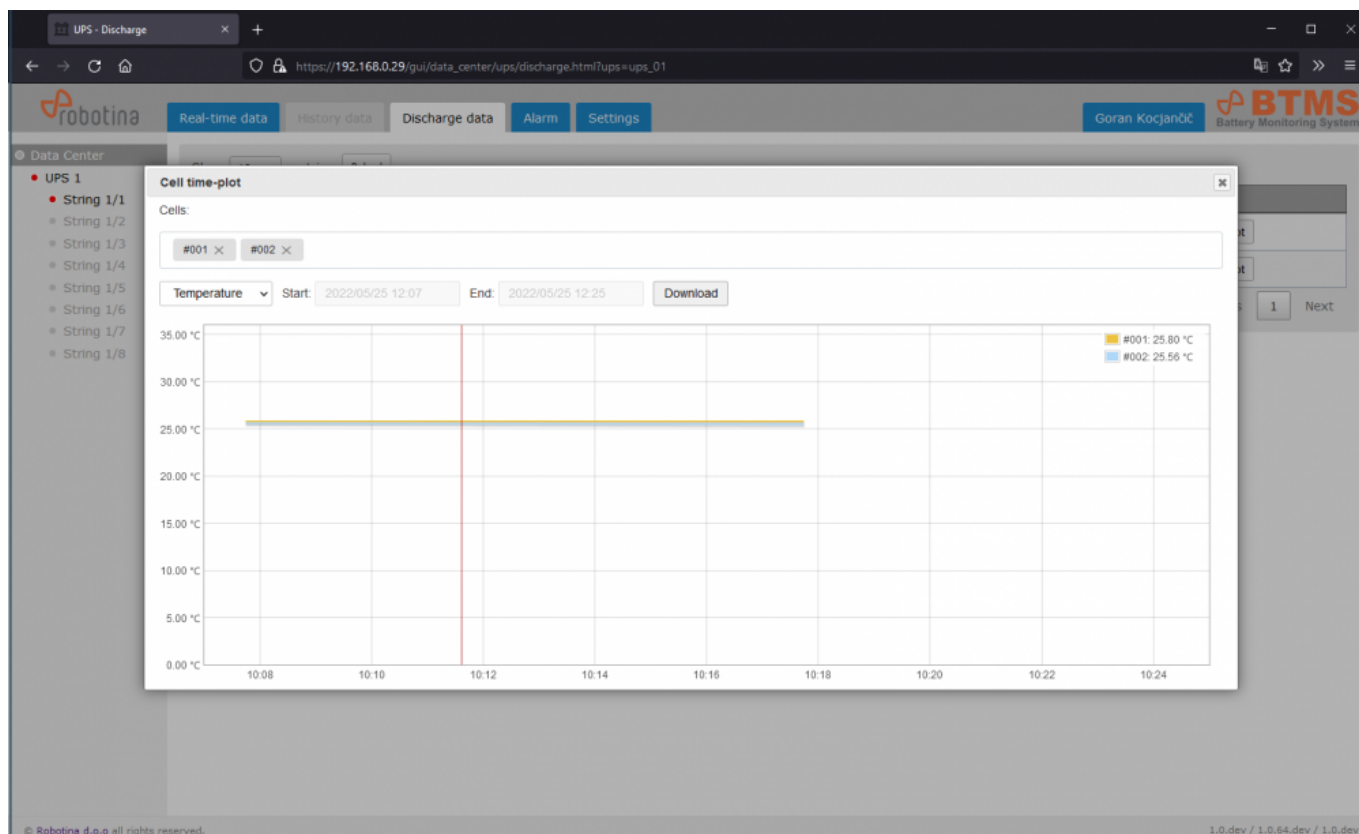
The screenshot shows the 'Discharge data' tab. The table lists two discharge events. The interface includes a sidebar with 'Data Center' and 'UPS 1' sections, and a top navigation bar with tabs for 'Real-time data', 'History data', 'Discharge data', 'Alarm', and 'Settings'.

#	UPS	String	Start	End	Action
2	#01	#01	05/25/2022 16:45:36	05/26/2022 09:11:26	String time-plot Cell time-plot
1	#01	#01	05/25/2022 12:07:23	05/25/2022 12:25:33	String time-plot Cell time-plot

String time-plot



Cell time-plot



Alarm

UPS - Alarms

https://192.168.0.29/gui/data_center/ups/alarms/alarms.html?ups=ups_01

robotina

Real-time dataHistory dataDischarge dataAlarmSettings

The Main Admin UserBTMSBattery Monitoring System

Data Center

UPS 1

String 1/1

Show10entriesReloadDownload

#	String	Cell	From	To	Alarm	Status
14	#01	#001	06/07/2022 14:22:20		Temperature high	active
13	#01		06/06/2022 13:35:56	06/06/2022 13:38:24	Current low (discharging)	gone
12	#01		06/06/2022 13:29:16	06/06/2022 13:38:24	Current high (charging)	gone
11	#01		06/06/2022 13:14:48	06/06/2022 13:28:41	Voltage low	gone
10	#01		06/06/2022 13:14:48	06/06/2022 13:28:41	Voltage high	gone
9	#01		06/06/2022 13:14:48	06/06/2022 13:28:41	Current low (discharging)	gone
8	#01		06/06/2022 13:14:48	06/06/2022 13:28:41	Current high (charging)	gone
7	#01		06/06/2022 13:00:19	06/06/2022 13:00:51	Voltage low	gone
6	#01		06/06/2022 12:43:25	06/06/2022 13:00:51	Voltage high	gone
5	#01		06/06/2022 12:43:25	06/06/2022 13:00:51	Current low (discharging)	gone

Showing 1 to 10 of 14 entriesPrevious12Next

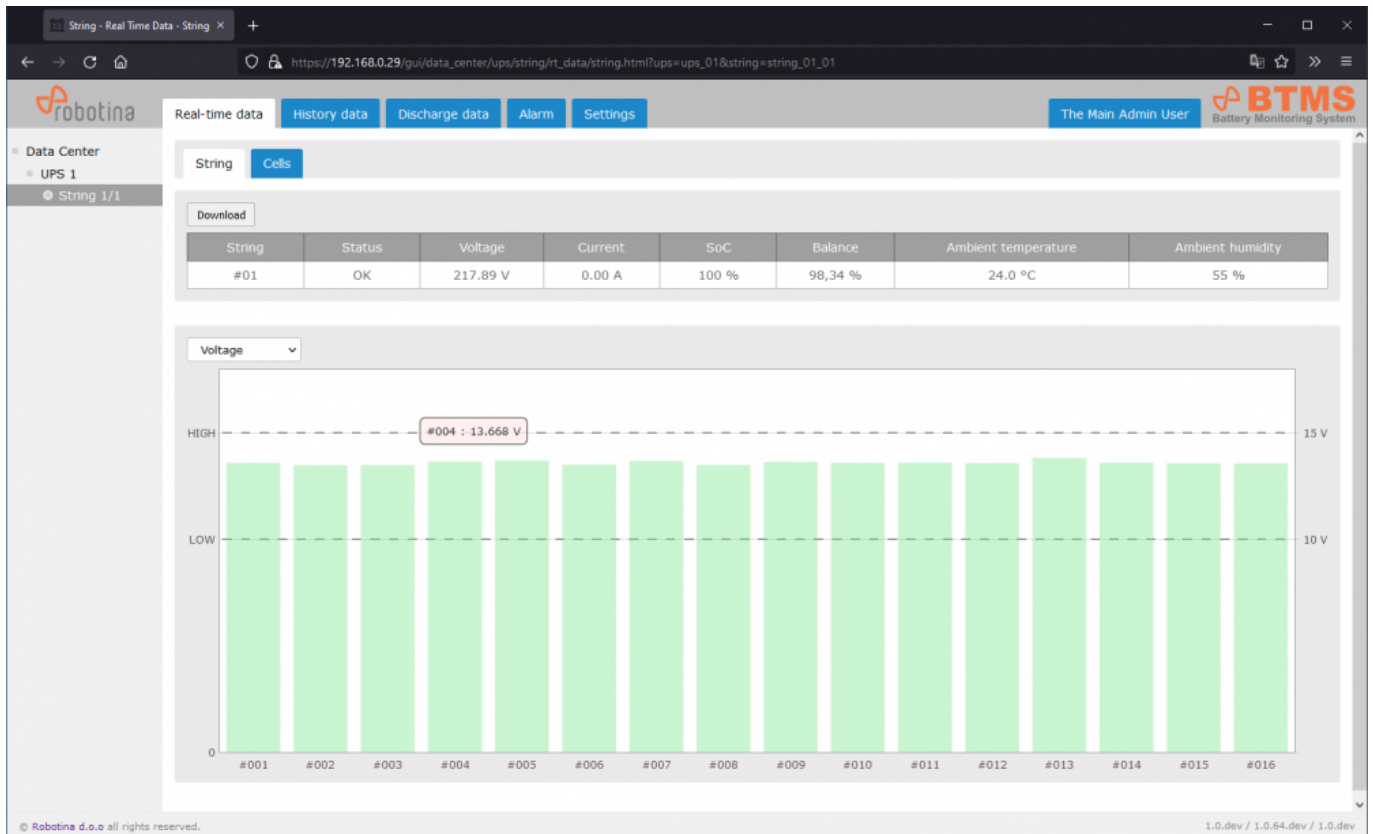
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1.0.0dev / 1.0.64.0dev / 1.0.0dev

String

Real-time data

String



Cells

String - Real Time Data - Cells

https://192.168.0.29/gui/data_center/ups/string/rt_data/cells.html?ups=ups_01&string=string_01_01

Robotina BTMS Battery Monitoring System

The Main Admin User

Real-time data | History data | Discharge data | Alarm | Settings

String | Cells

Show 10 entries | Download

Cell	Status	Voltage	Resistance	Temperature	SoC	SoH
#001	OK	13.611 V	18.036 mΩ	300.0 °C	100 %	76 %
#002	OK	13.502 V	16.718 mΩ	300.0 °C	100 %	79 %
#003	OK	13.506 V	16.674 mΩ	300.0 °C	100 %	79 %
#004	OK	13.666 V	15.875 mΩ	300.0 °C	100 %	81 %
#005	OK	13.725 V	15.655 mΩ	300.0 °C	100 %	82 %
#006	OK	13.529 V	15.439 mΩ	300.0 °C	100 %	82 %
#007	OK	13.703 V	15.058 mΩ	300.0 °C	100 %	83 %
#008	OK	13.512 V	18.096 mΩ	300.0 °C	100 %	76 %
#009	OK	13.655 V	15.747 mΩ	300.0 °C	100 %	82 %
#010	OK	13.611 V	15.647 mΩ	300.0 °C	100 %	82 %

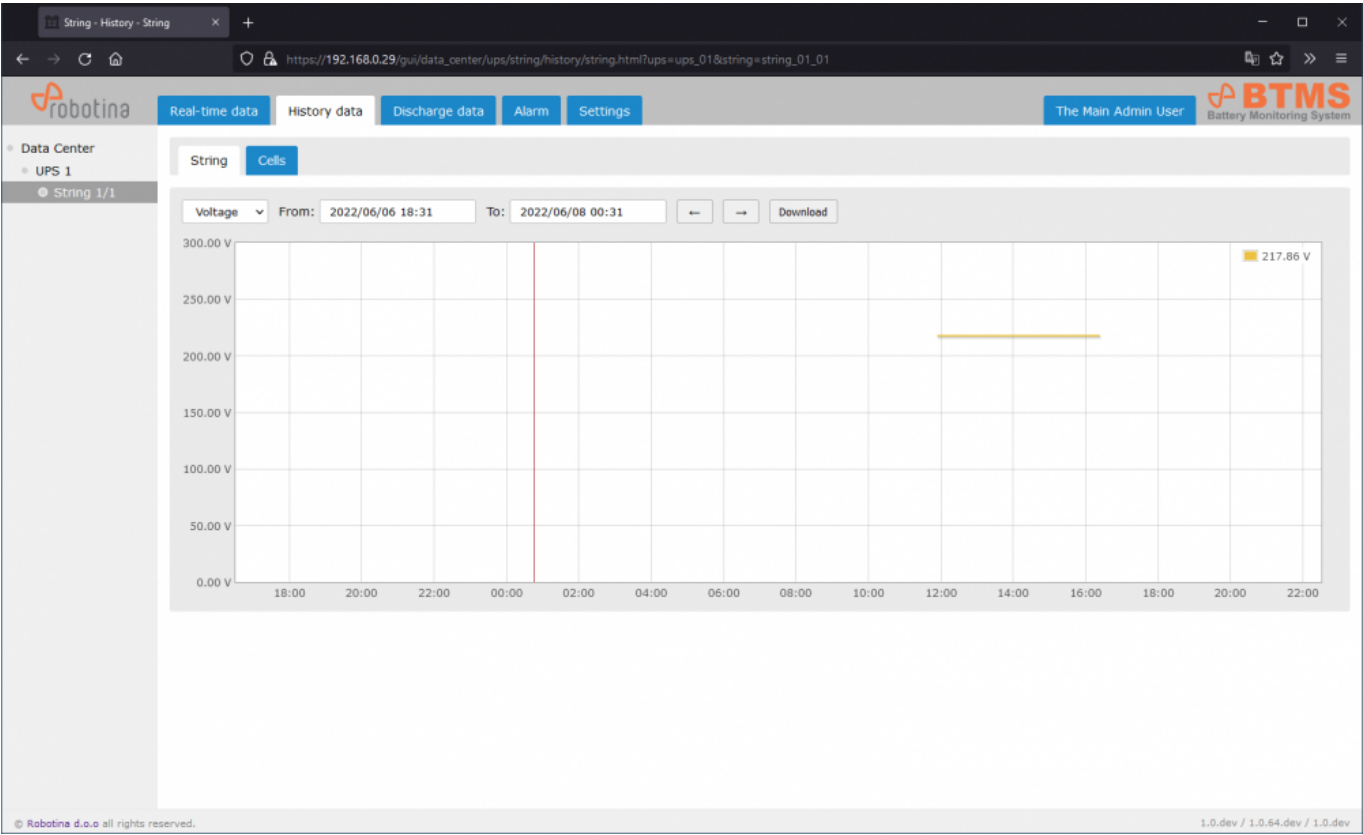
Showing 1 to 10 of 16 entries

Previous 1 2 Next

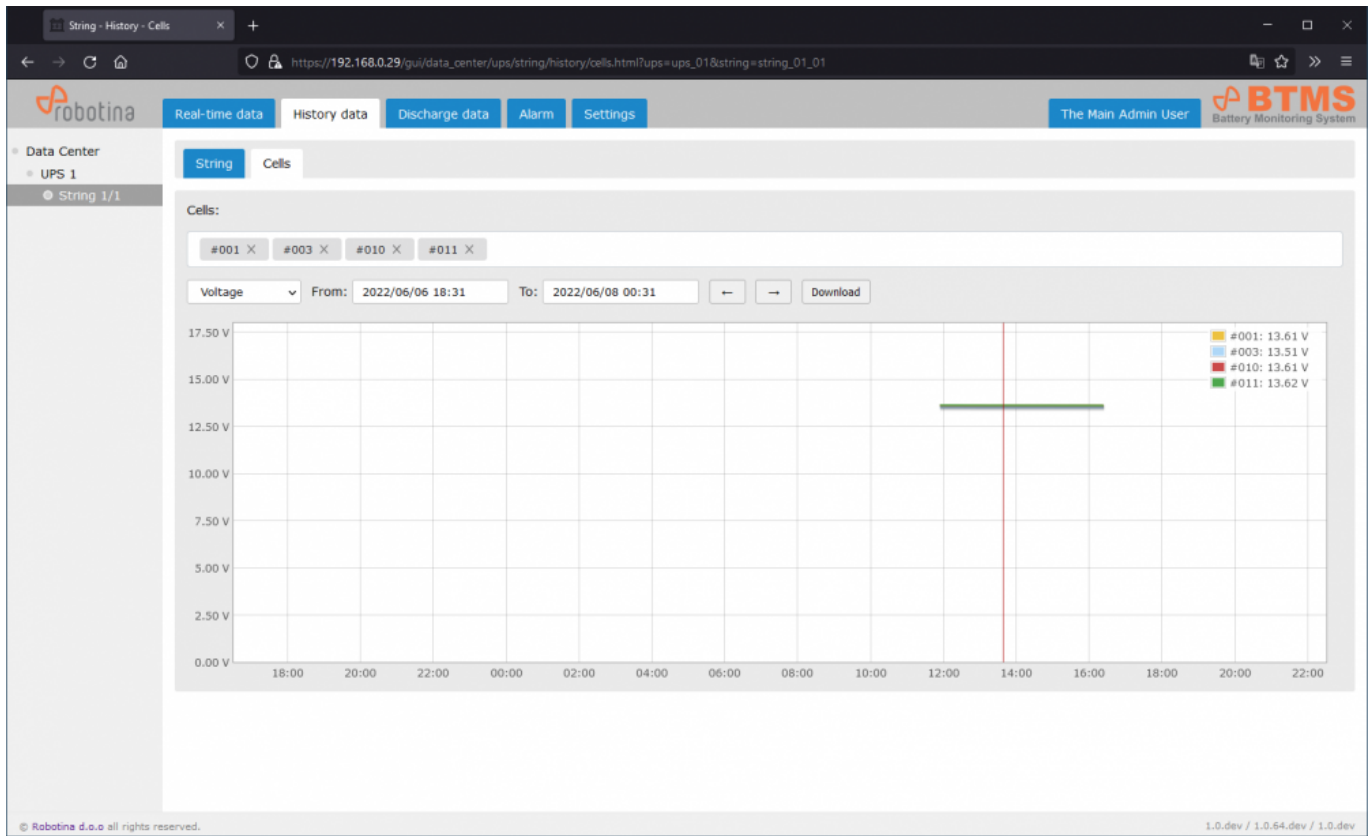
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History data

String



Cells



Discharge data

String - Discharge

https://192.168.0.29/gui/data_center/ups/string/discharge.html?ups=ups_01&string=string_01_01

Robotina BTMS Battery Monitoring System

Goran Kocjančič

Real-time data History data Discharge data Alarm Settings

Data Center

UPS 1

String 1/1

String 1/2

String 1/3

String 1/4

String 1/5

String 1/6

String 1/7

String 1/8

Show 10 entries

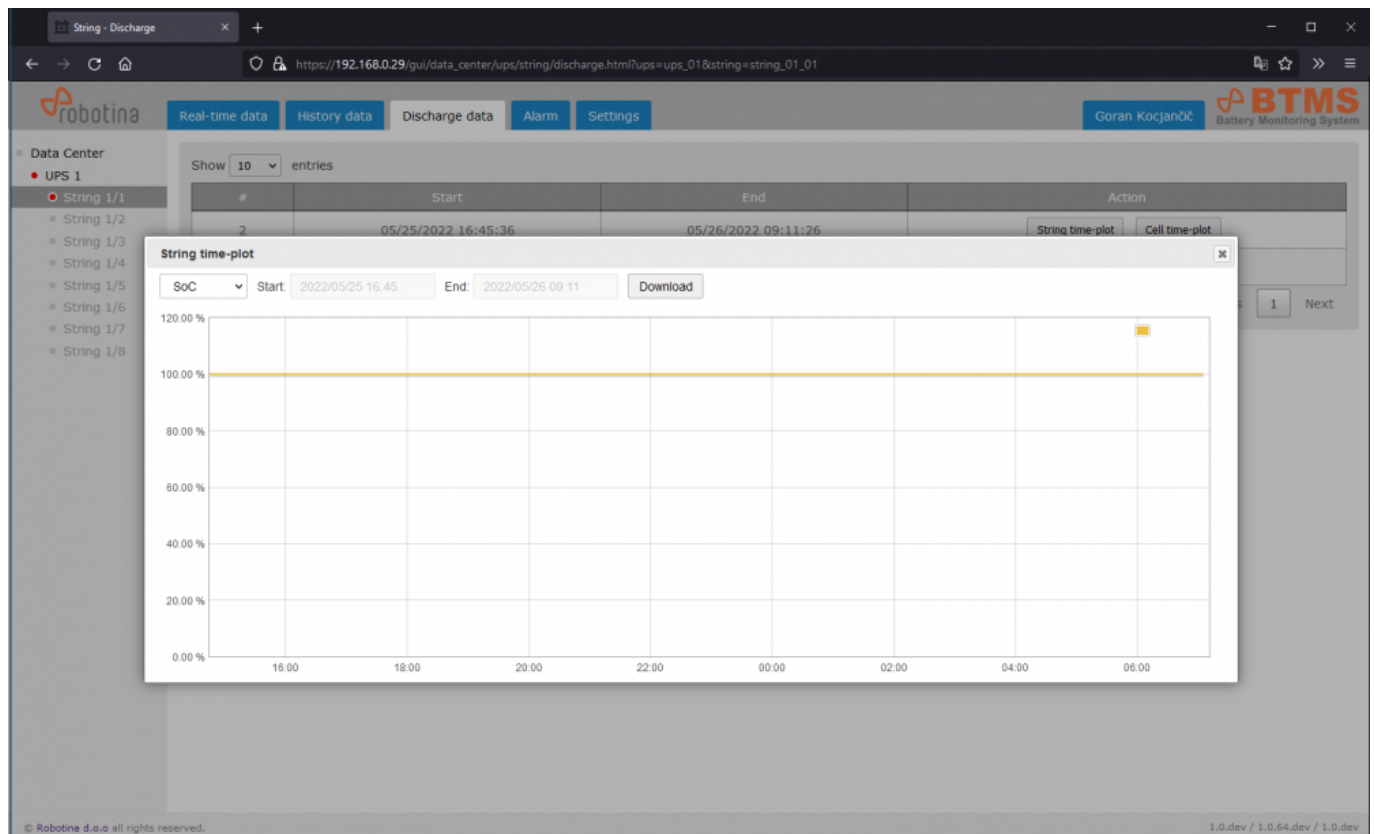
#	Start	End	Action
2	05/25/2022 16:45:36	05/26/2022 09:11:26	String time-plot Cell time-plot
1	05/25/2022 12:07:23	05/25/2022 12:25:33	String time-plot Cell time-plot

Showing 1 to 2 of 2 entries

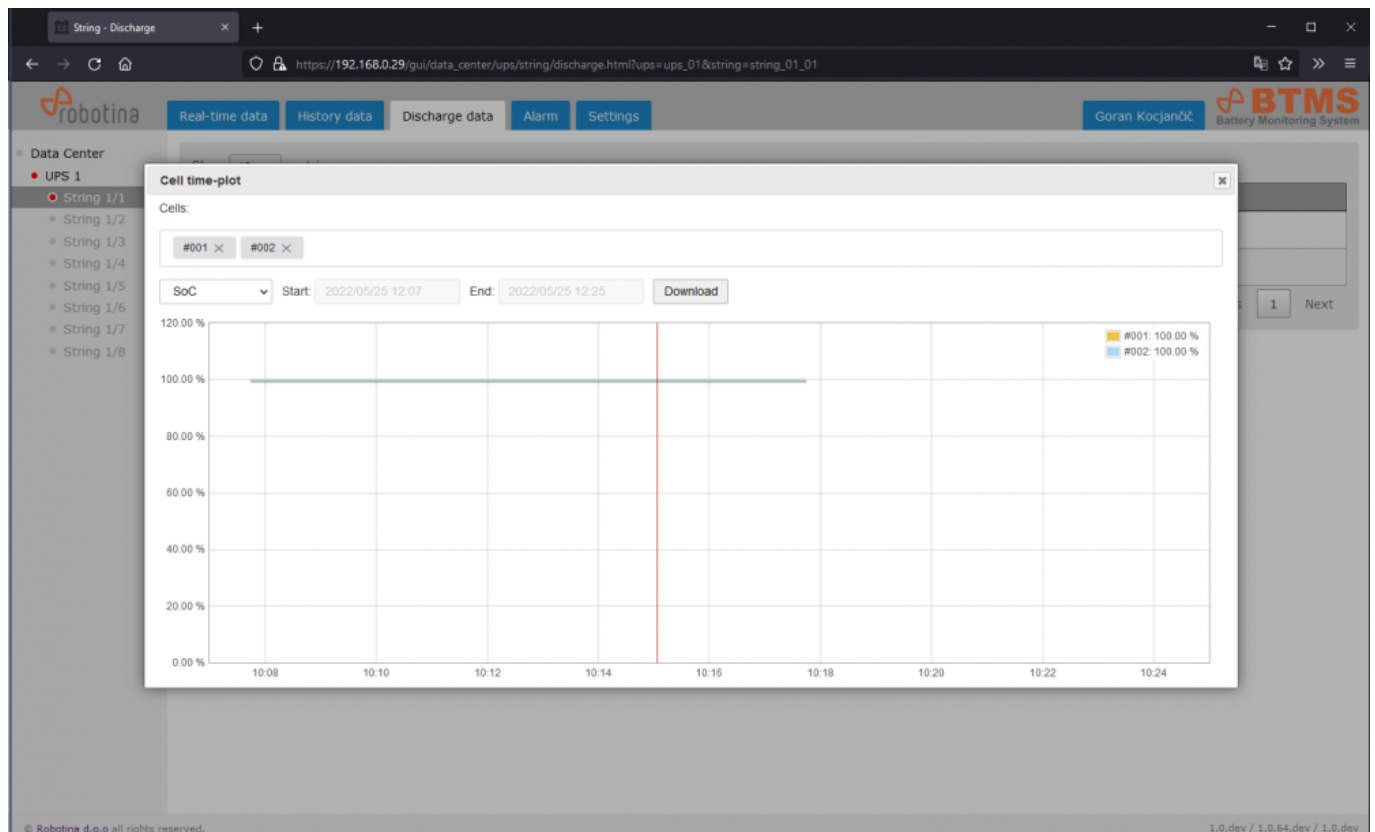
Previous 1 Next

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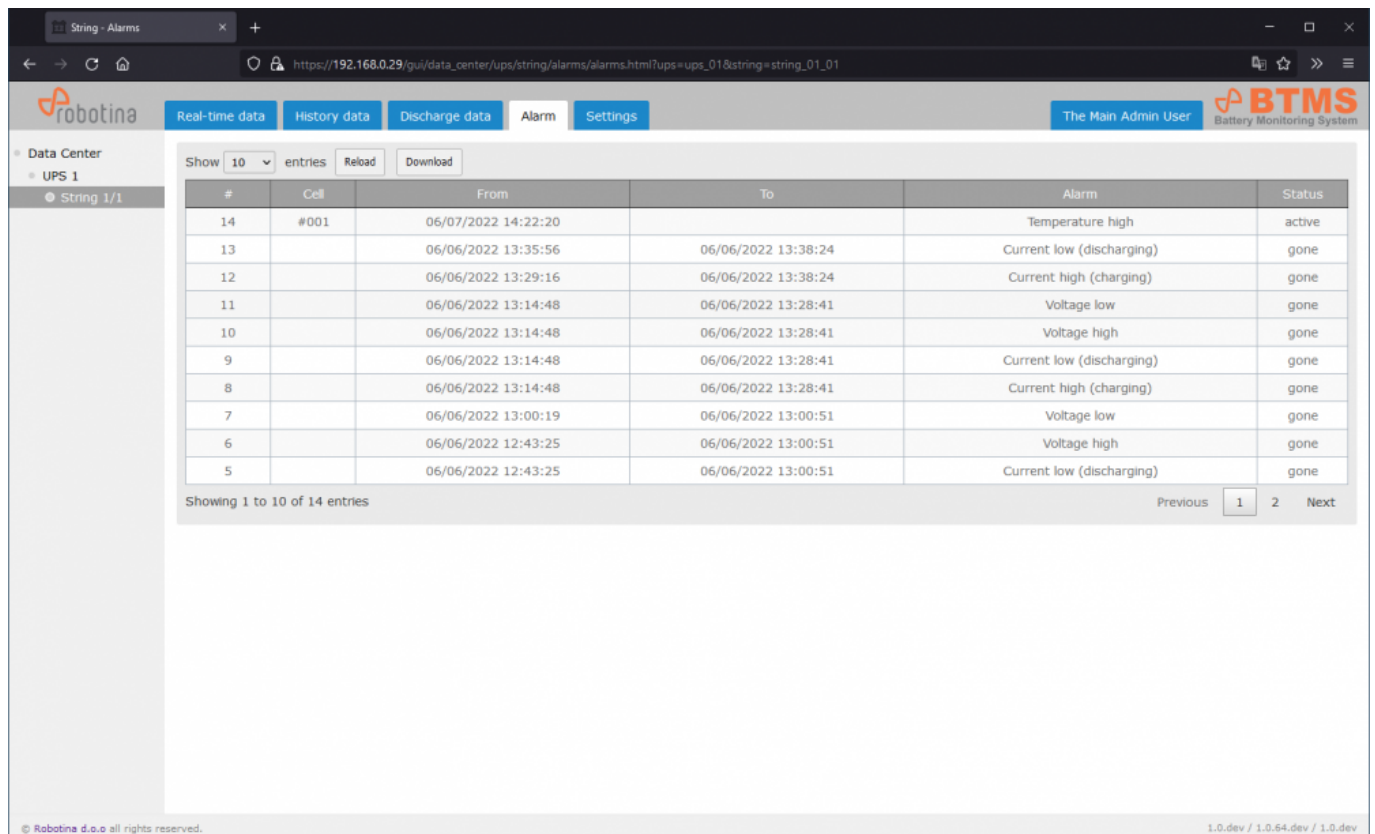
String time-plot



Cell time-plot



Alarm



String - Alarms

https://192.168.0.29/gui/data_center/ups/string/alarms/alarms.html?ups=ups_01&string=string_01_01

robotina BTMS Battery Monitoring System

The Main Admin User

Real-time data History data Discharge data Alarm Settings

Data Center
UPS 1
String 1/1

Show 10 entries Reload Download

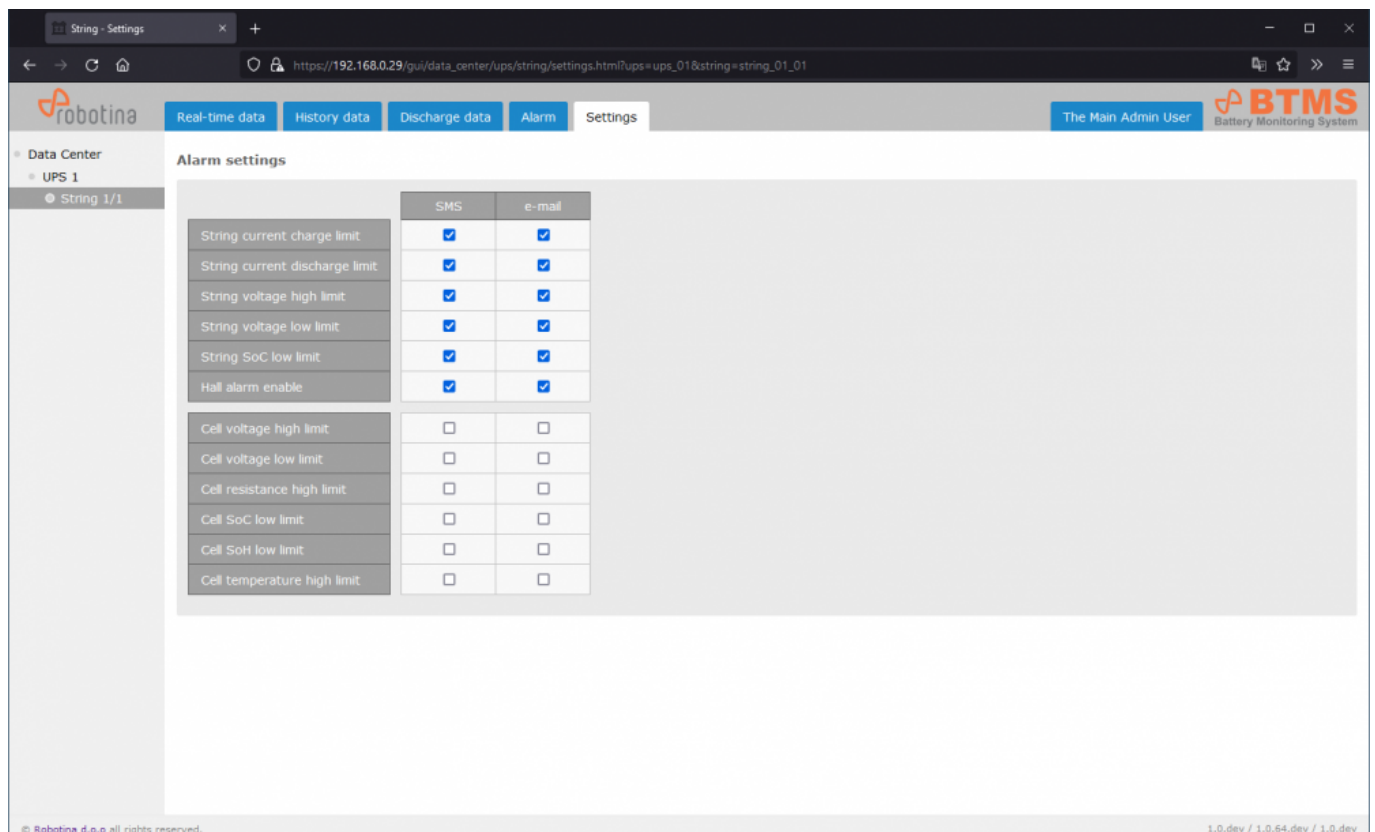
#	Cell	From	To	Alarm	Status
14	#001	06/07/2022 14:22:20		Temperature high	active
13		06/06/2022 13:35:56	06/06/2022 13:38:24	Current low (discharging)	gone
12		06/06/2022 13:29:16	06/06/2022 13:38:24	Current high (charging)	gone
11		06/06/2022 13:14:48	06/06/2022 13:28:41	Voltage low	gone
10		06/06/2022 13:14:48	06/06/2022 13:28:41	Voltage high	gone
9		06/06/2022 13:14:48	06/06/2022 13:28:41	Current low (discharging)	gone
8		06/06/2022 13:14:48	06/06/2022 13:28:41	Current high (charging)	gone
7		06/06/2022 13:00:19	06/06/2022 13:00:51	Voltage low	gone
6		06/06/2022 12:43:25	06/06/2022 13:00:51	Voltage high	gone
5		06/06/2022 12:43:25	06/06/2022 13:00:51	Current low (discharging)	gone

Showing 1 to 10 of 14 entries

Previous 1 2 Next

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Settings



String - Settings

https://192.168.0.29/gui/data_center/ups/string/settings.html?ups=ups_01&string=string_01_01

robotina BTMS Battery Monitoring System

The Main Admin User

Real-time data History data Discharge data Alarm Settings

Data Center
UPS 1
String 1/1

Alarm settings

	SMS	e-mail
String current charge limit	☒	☒
String current discharge limit	☒	☒
String voltage high limit	☒	☒
String voltage low limit	☒	☒
String SoC low limit	☒	☒
Hall alarm enable	☒	☒
Cell voltage high limit	☐	☐
Cell voltage low limit	☐	☐
Cell resistance high limit	☐	☐
Cell SoC low limit	☐	☐
Cell SoH low limit	☐	☐
Cell temperature high limit	☐	☐

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Enable for which alarm SMS / e-mail will be sent.