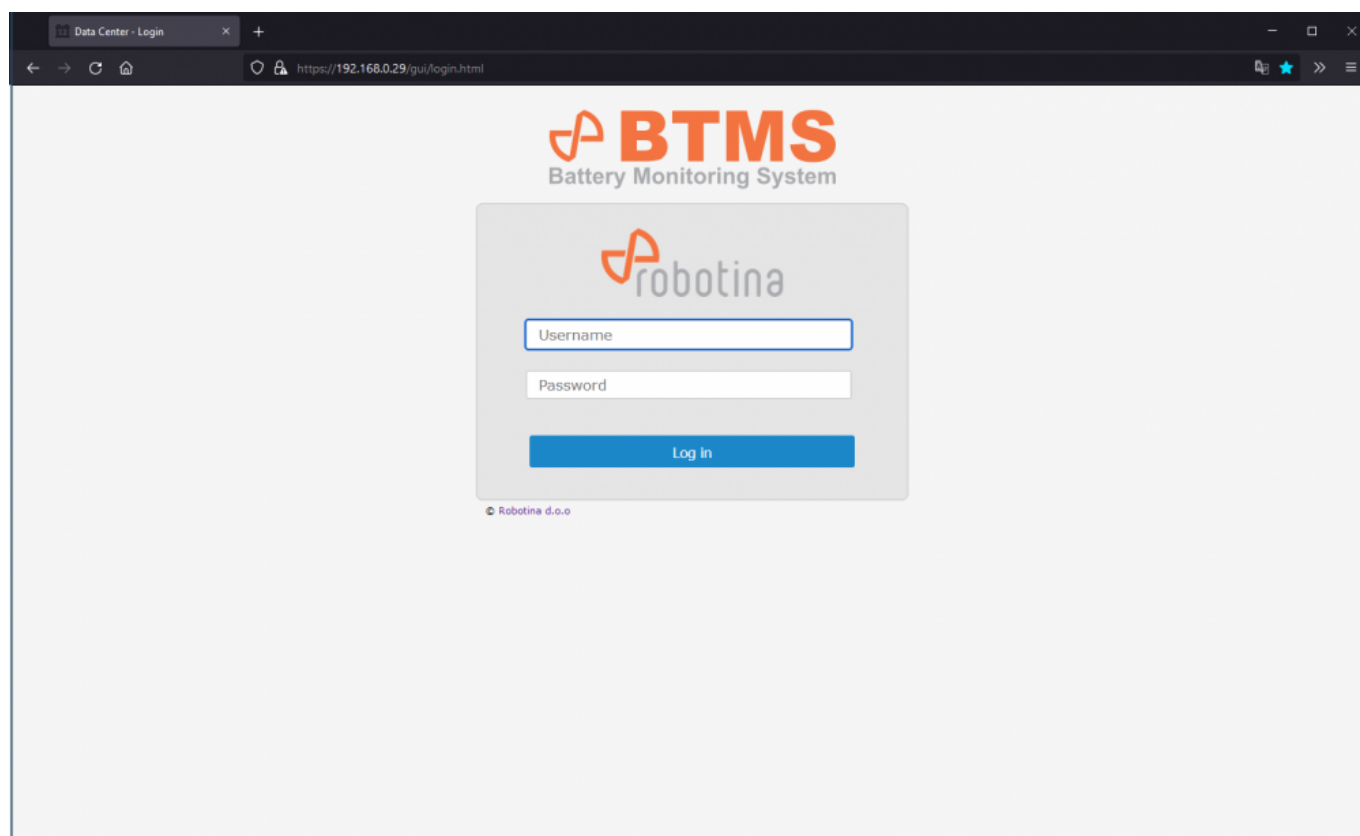


BM-GW WEB UI

- 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

The screenshot shows the 'Settings' page of the Robotina BTMS Battery Monitoring System. The 'Network settings' section is highlighted with a yellow box. It contains a table with the following data:

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

The NTP settings section shows 'Custom NTP' with a table:

Host	Port	Enabled
		☒

The 'Default NTP pools (ENABLED)' section lists the following hosts:

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

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

General description

The screenshot shows the 'Real-time data' page of the Robotina BTMS Battery Monitoring System. The page displays a table with the following data:

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

Below the table is a graph showing Voltage over time. The graph has a green shaded area representing the voltage range. The y-axis is labeled 'Voltage' and has 'HIGH' and 'LOW' markers. The x-axis is labeled '#01'.

Numbered callouts highlight specific UI elements:

- 1: The 'Settings' tab in the top navigation bar.
- 2: The 'Data Center' sidebar menu.
- 3: The 'Load' button above the table.

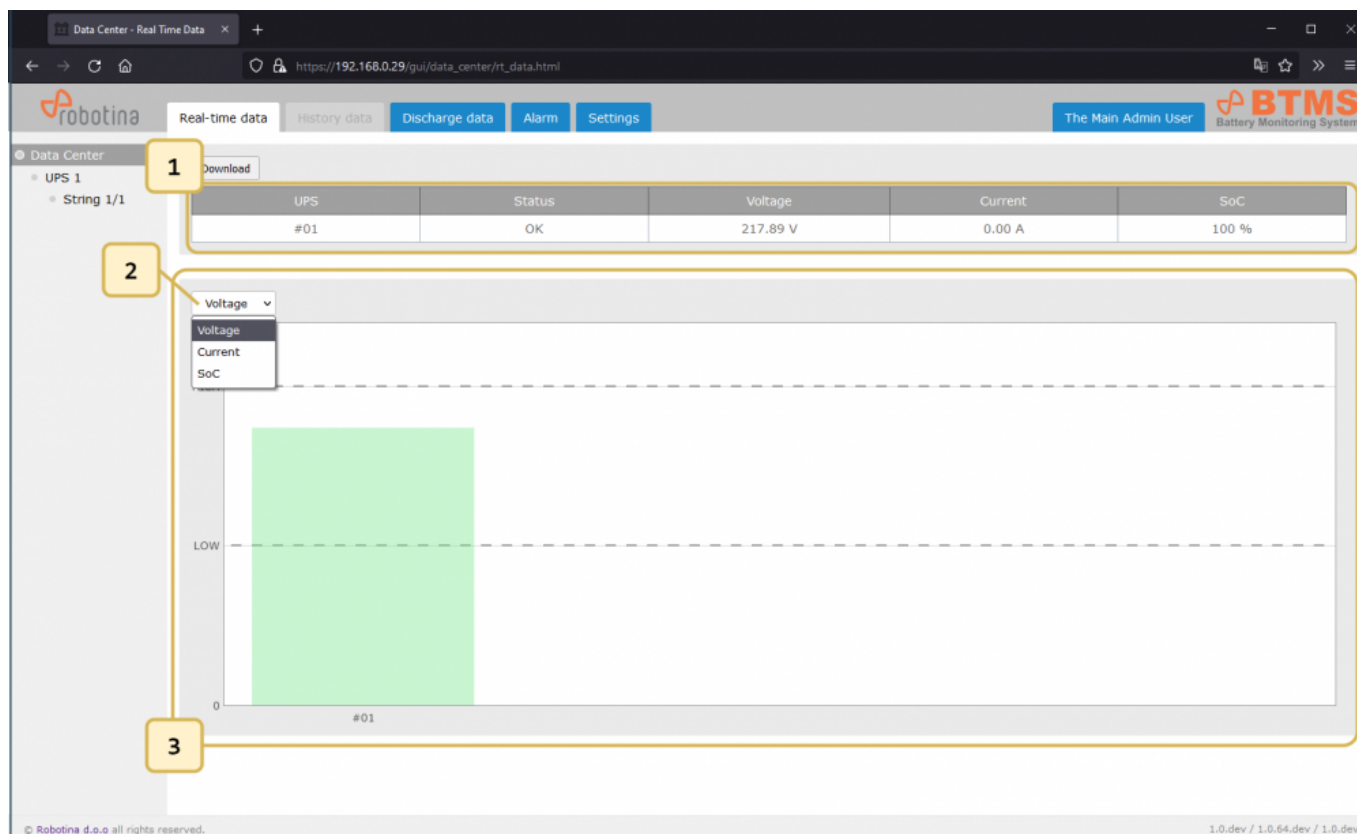
1

Pages tabs

2	Data center tree structure
3	Page data

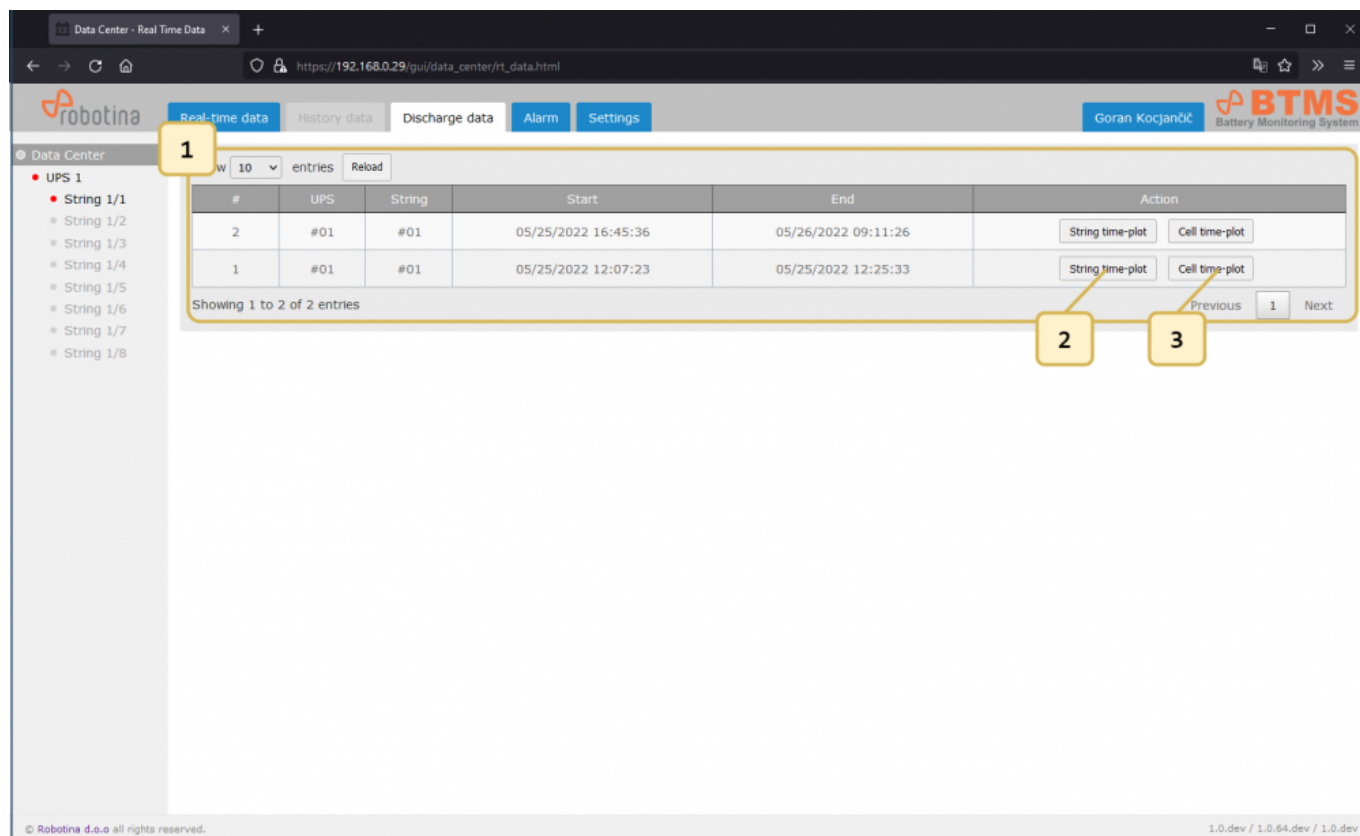
Data center

Real-time data



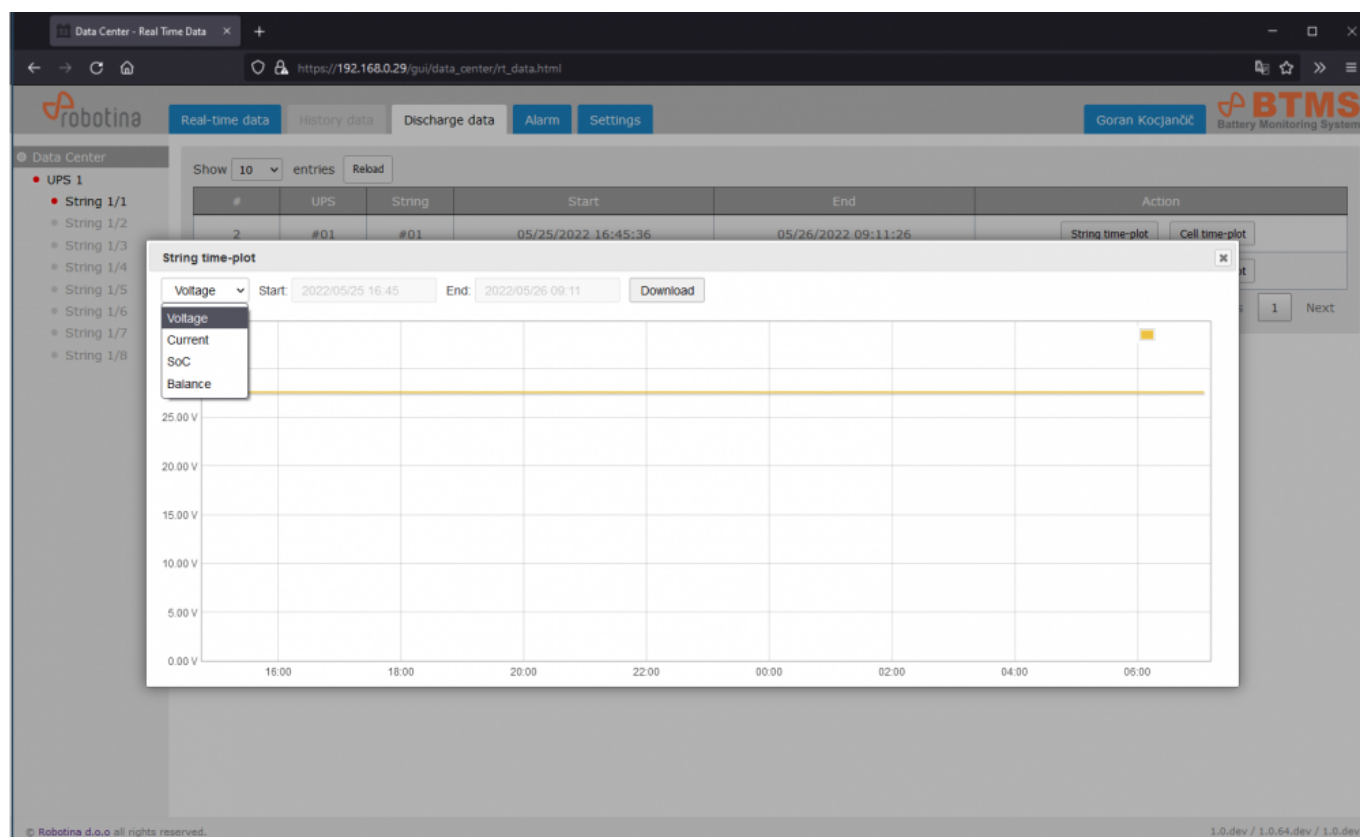
1	Tabular display of data for the Data Center
2	Select a parameter for the graphic display
3	Graphic bar-graph data display for the data center

Discharge data

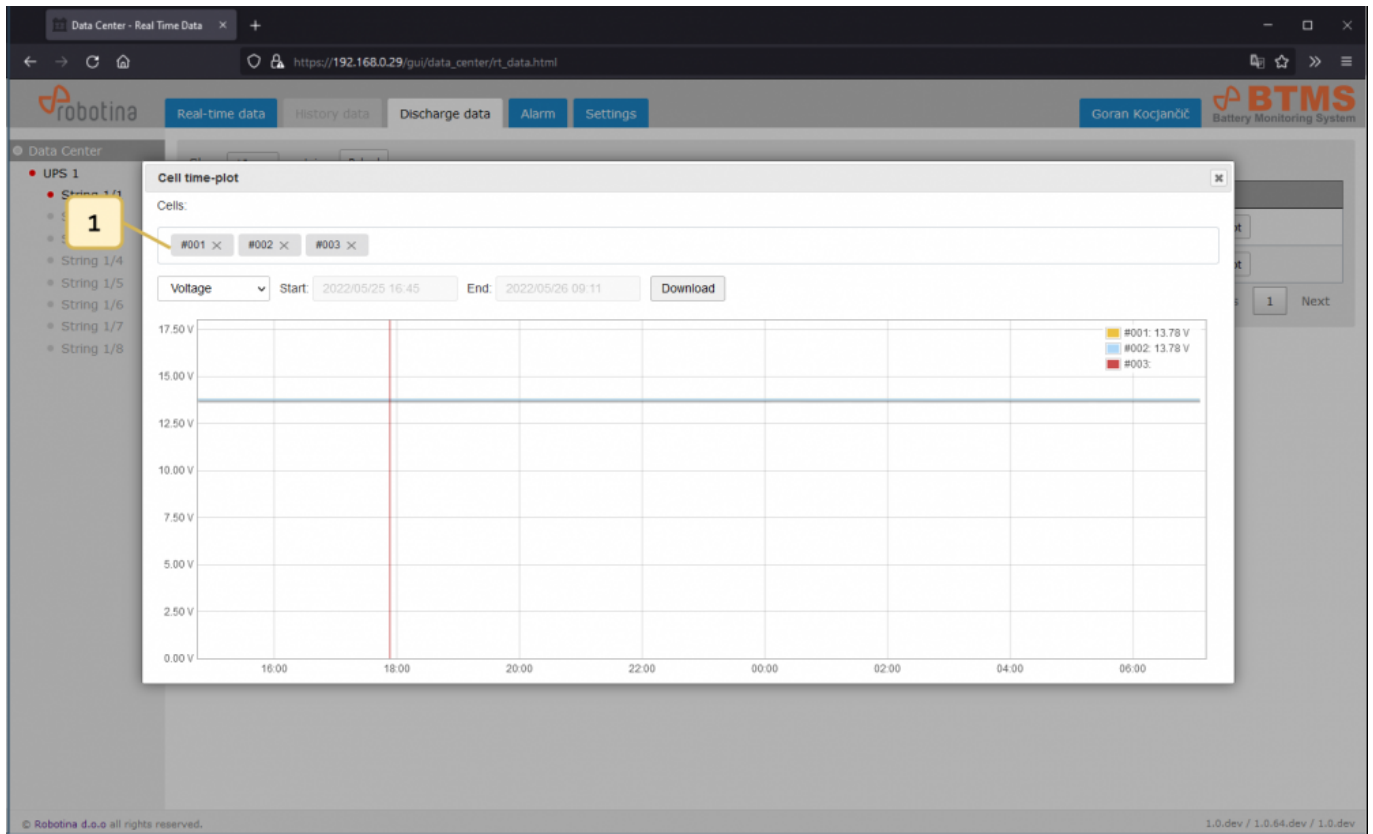


- | | |
|---|--------------------------------------|
| 1 | Discharge events table |
| 2 | String time-plot for discharge event |
| 3 | Cell time-plot for discharge event |

String time-plot for discharge event



Cell time-plot for discharge event



1

Cell selection

Alarm

The screenshot shows the 'Alarm' section in the Robotina BTMS web interface. The table displays a list of alarms with columns for #, UPS, String, Cell, From, To, Alarm, and Status. The table shows 14 entries, with the first 10 displayed. The status of the alarms is 'active' or 'gone'.

#	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

2

1	Alarms sub-page selection
2	Alarms table

E-mails

Data Center - Sent E-mails

https://192.168.0.29/gui/data_center/alarms/sent_emails.html

Robotina

Real-time data History data Discharge data Alarm Settings

The Main Admin User BTMS Battery Monitoring System

Data Center

- UPS 1
 - String 1/1

Alarms E-mails SMS

Show 10 entries Reload Download

#	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

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SMS

Data Center - Sent SMS

https://192.168.0.29/gui/data_center/alarms/sent_sms.html

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

The Main Admin User | BTMS Battery Monitoring System

Data Center

- UPS 1
 - String 1/1

Alarms | E-mails | SMS

Show 10 entries | Reload | Download

#	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

Previous 1 Next

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Settings

Network settings, NTP settings

Data Center - Settings

https://192.168.0.29/gui/data_center/settings.html

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

The Main Admin User | BTMS Battery Monitoring System

Data Center

- UPS 1
 - String 1/1

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

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Time settings, Users

The screenshot shows the Robotina BTMS web interface. The top navigation bar includes tabs for Real-time data, History data, Discharge data, Alarm, and Settings. The left sidebar shows the Data Center structure with UPS 1 and String 1/1. The main content area is divided into three sections: Time settings, Users, and SMTP settings.

Time settings

Time: 18:10:09
Date: 06/07/2022
Timezone: Europe/Ljubljana

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	☒		

SMTP settings

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SNMP settings, SMS notifications, Project settings, Data export

The screenshot shows the Robotina BTMS web interface with the Settings tab selected. The main content area is divided into four sections: SMTP settings, SMS notifications, Project settings, and Data Export.

SMTP settings

Host	Port	From E-mail	Security	Username

SMS notifications

Test SMS: Your user does not have an associated phone number.

Project settings

Project name	Company	URL	Owner

Data Export

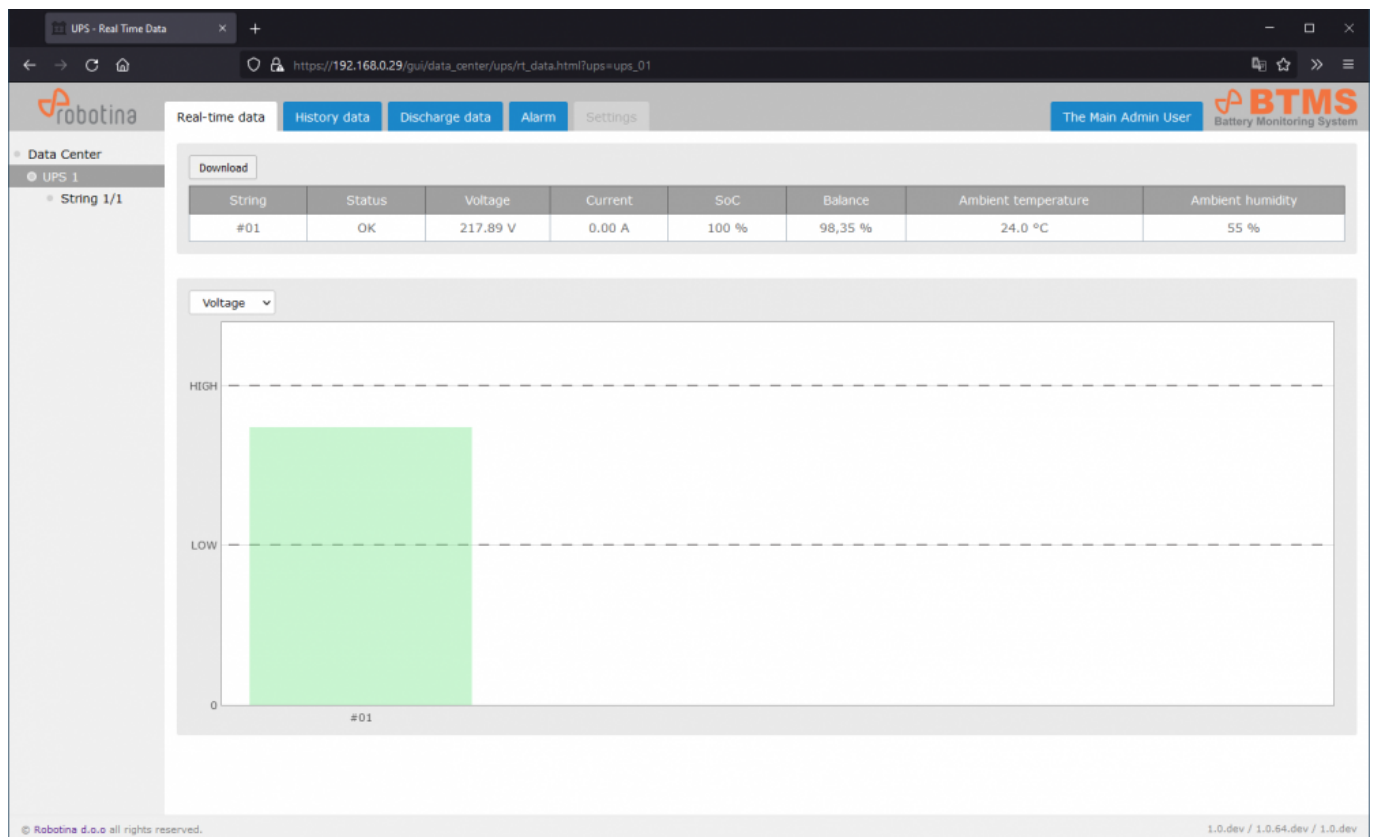
New data export

File	Size	Time
No data exports available		

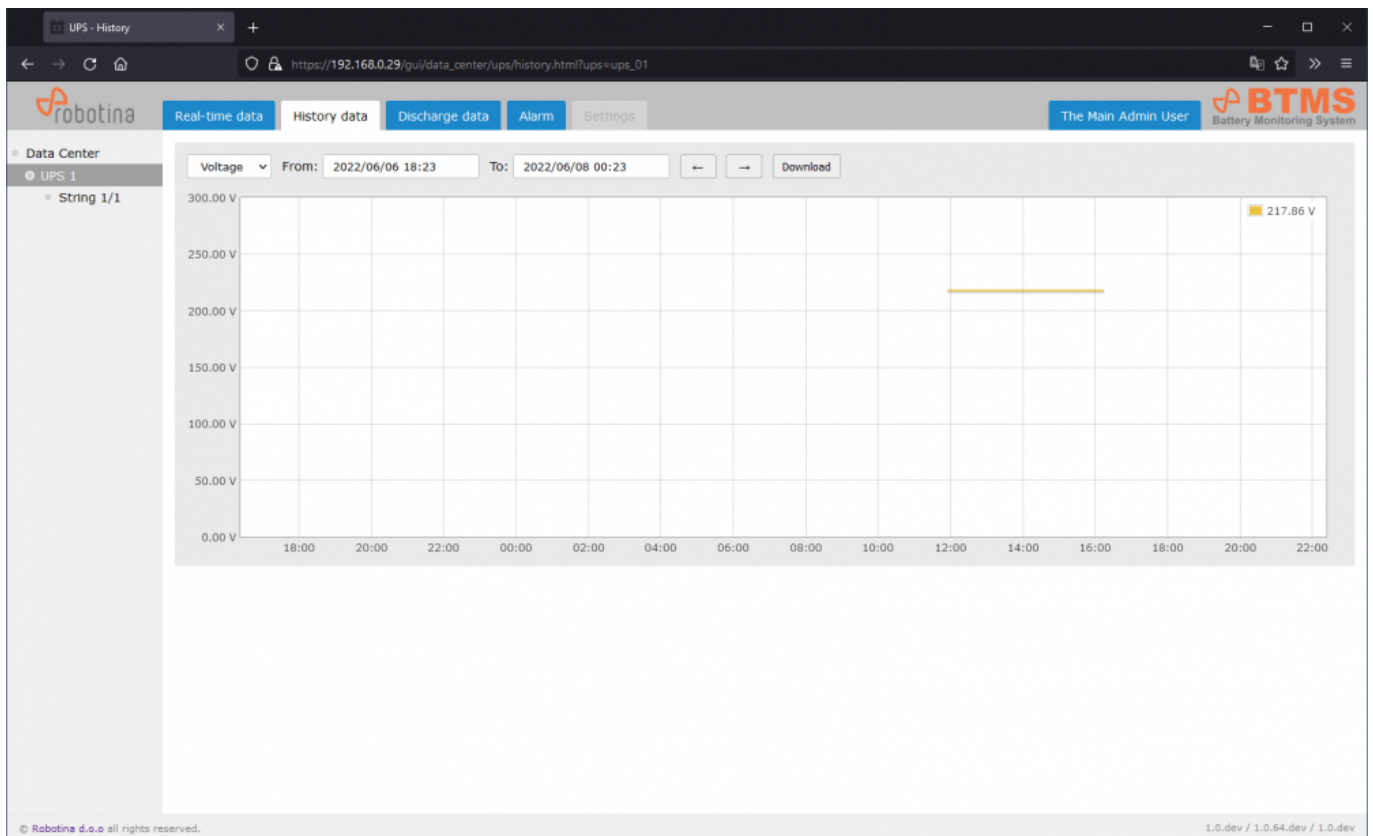
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UPS

Real-time data



History data



Discharge data

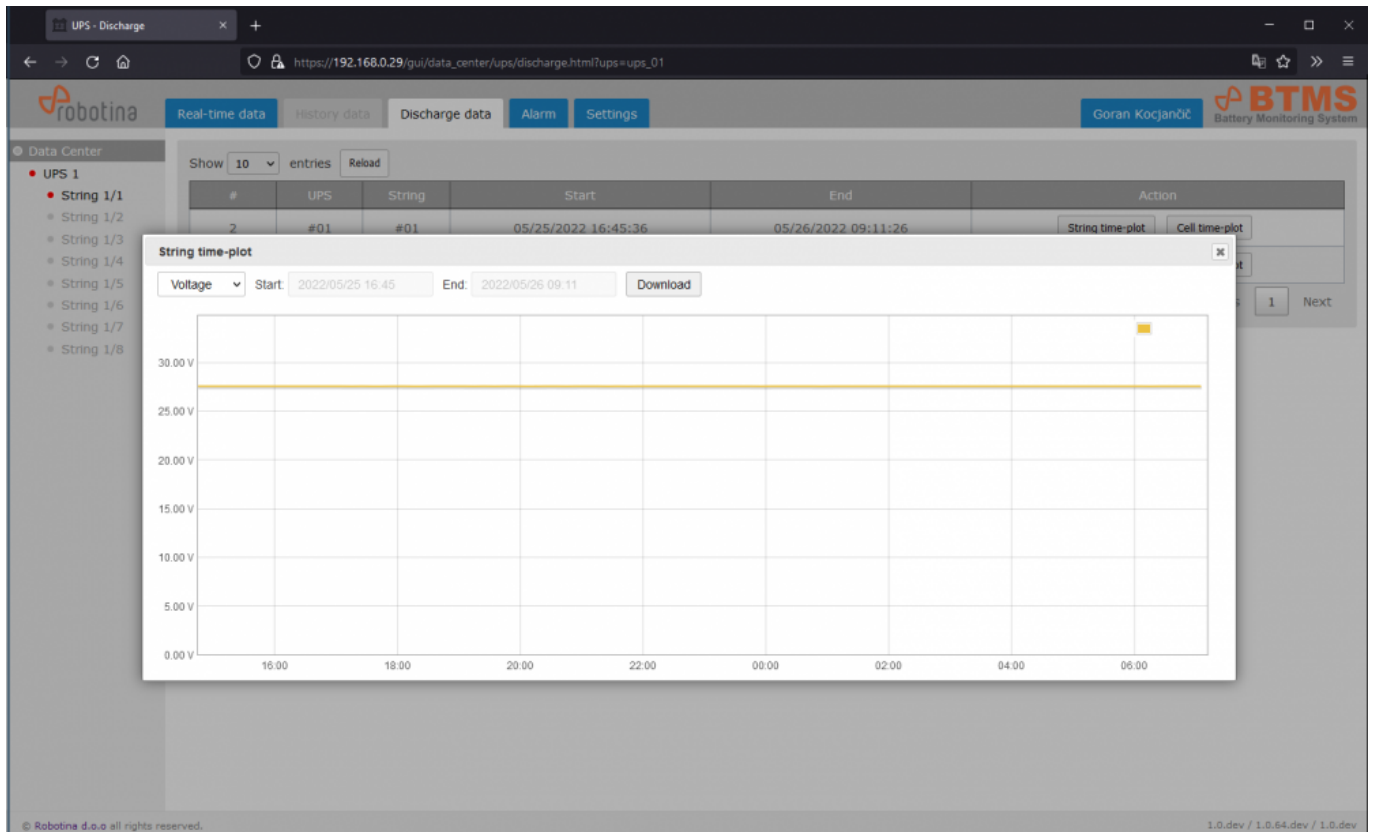
The screenshot shows the 'Discharge data' tab. The table displays two entries of discharge data for UPS 1, String 1/1. The table has columns for '#', 'UPS', 'String', 'Start', 'End', and 'Action'. The 'Action' column contains buttons for 'String time-plot' and 'Cell time-plot'.

#	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

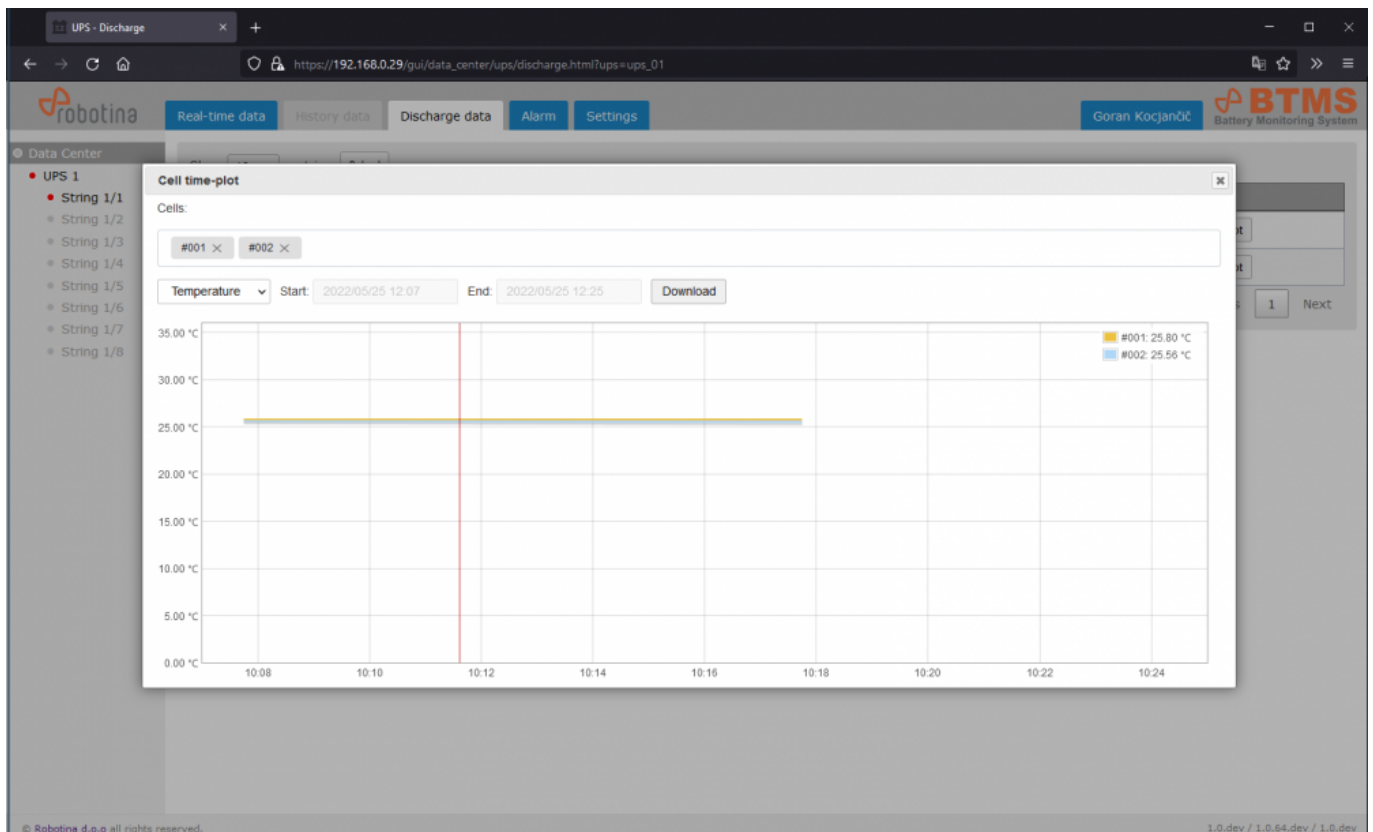
Showing 1 to 2 of 2 entries

Previous 1 Next

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 data History data Discharge data Alarm Settings

The Main Admin User BTMS Battery Monitoring System

Data Center

UPS 1

String 1/1

Show 10 entries Reload Download

#	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 entries

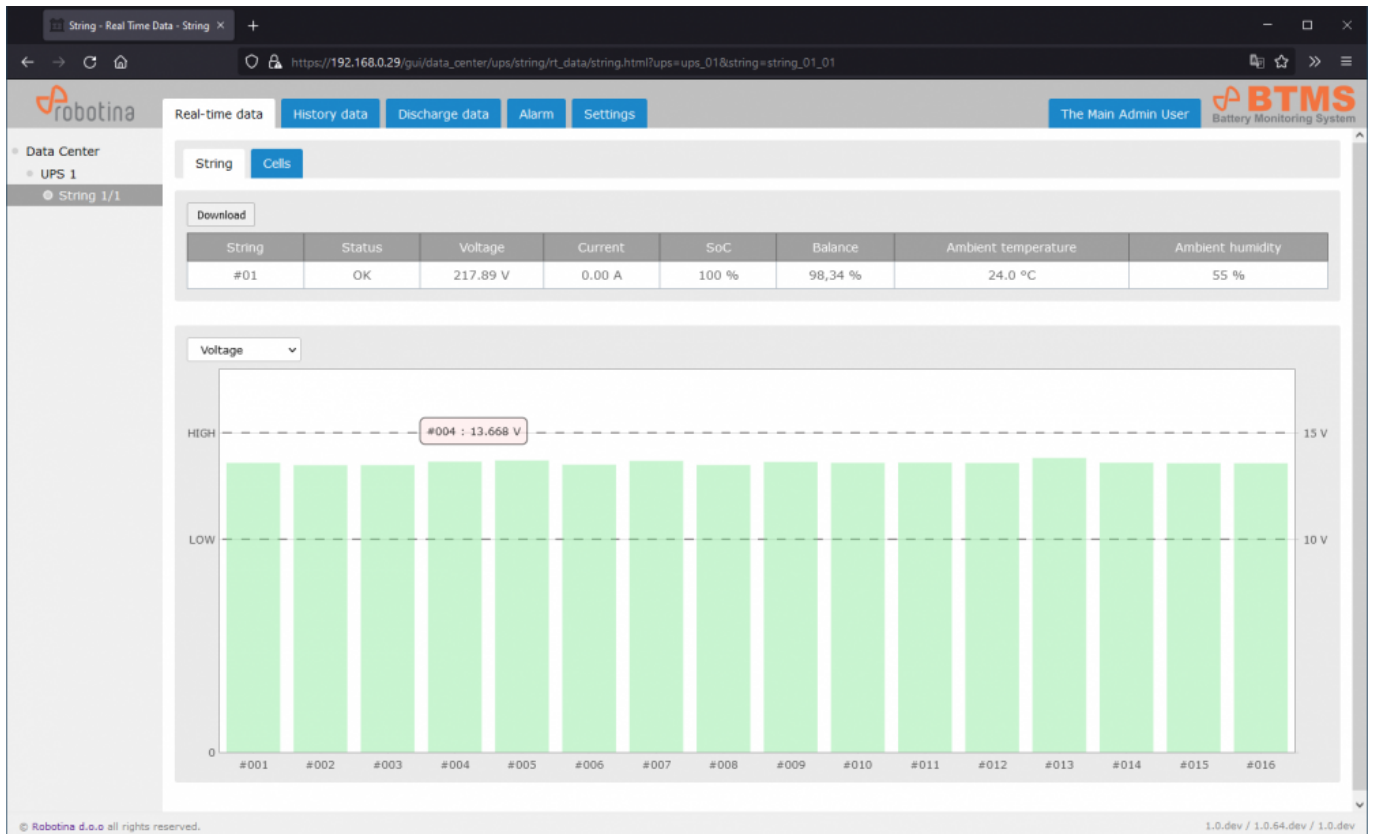
Previous 1 2 Next

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String

Real-time data

String



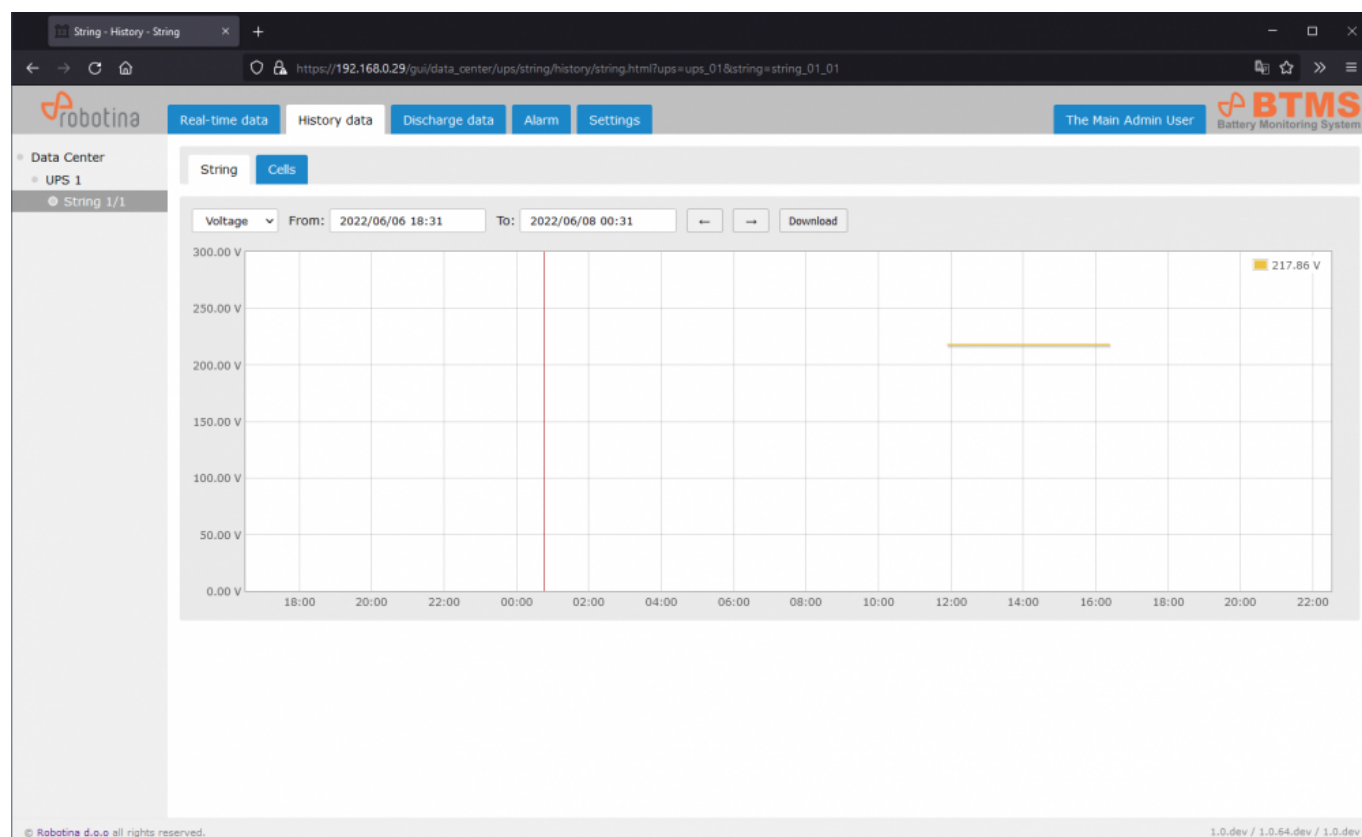
Cells

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 %

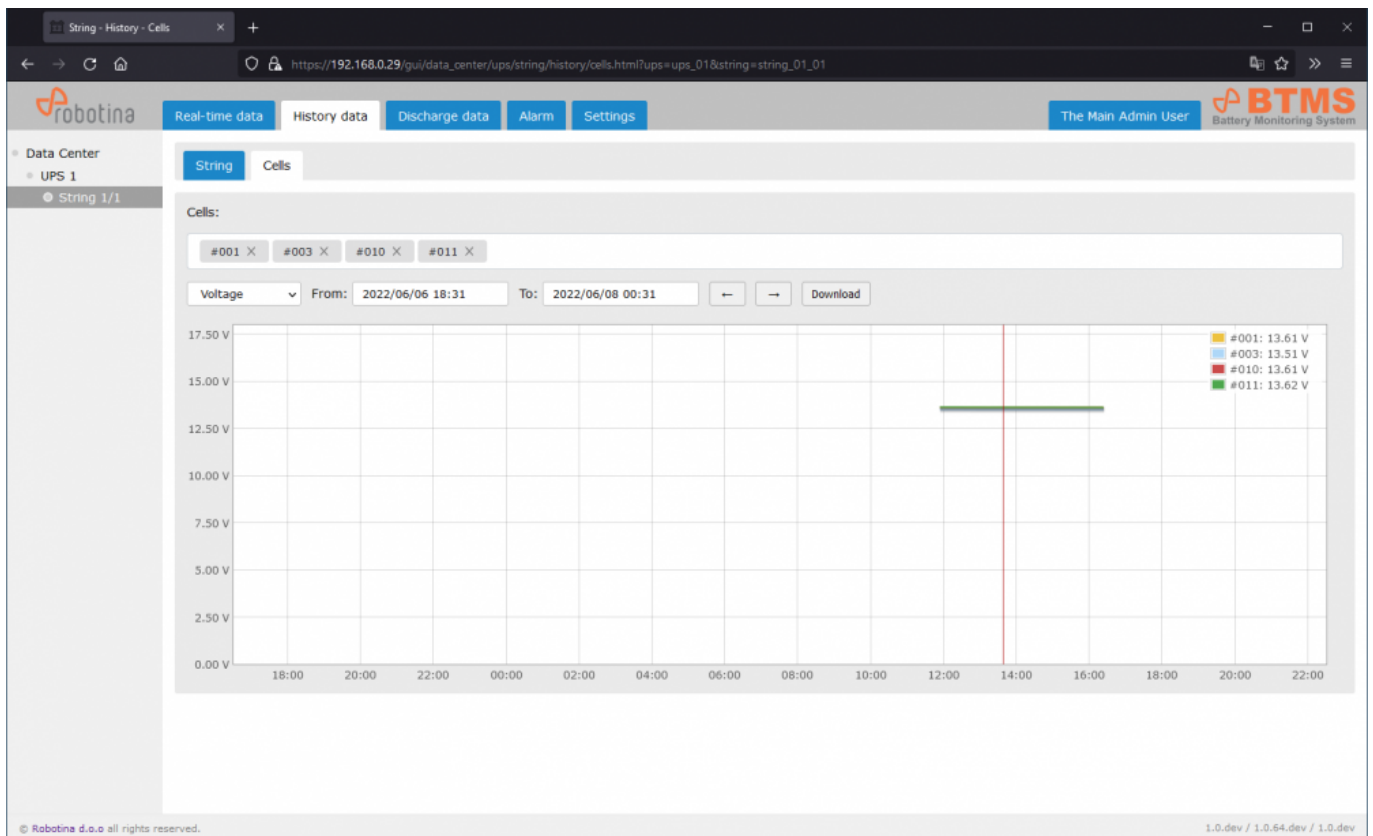
Showing 1 to 10 of 16 entries

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

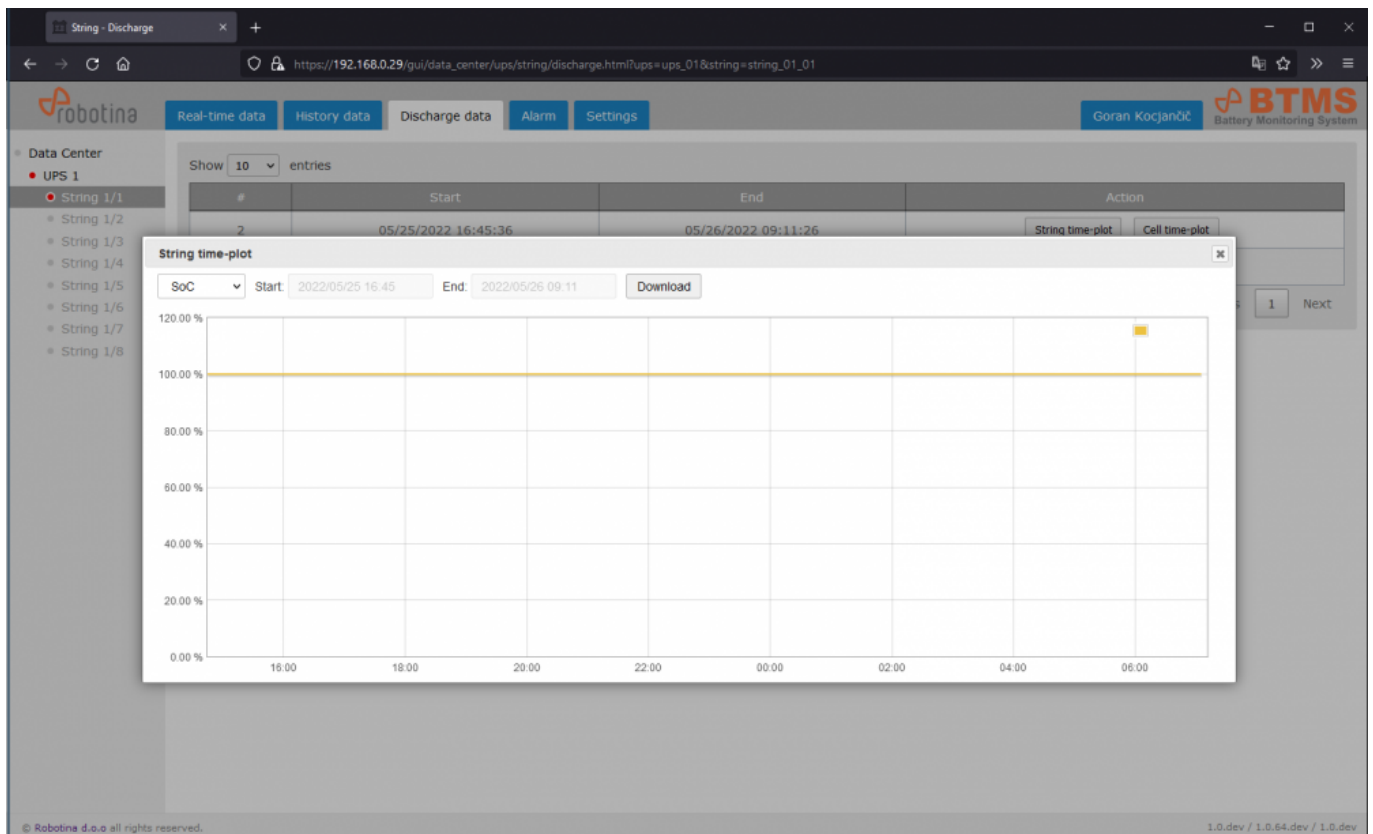
#	Start	End	Action
2	05/25/2022 16:45:36	05/26/2022 09:11:26	String time-plot Cell time-plot
1	05/25/2022 12:07:23	05/25/2022 12:25:33	String time-plot Cell time-plot

Showing 1 to 2 of 2 entries

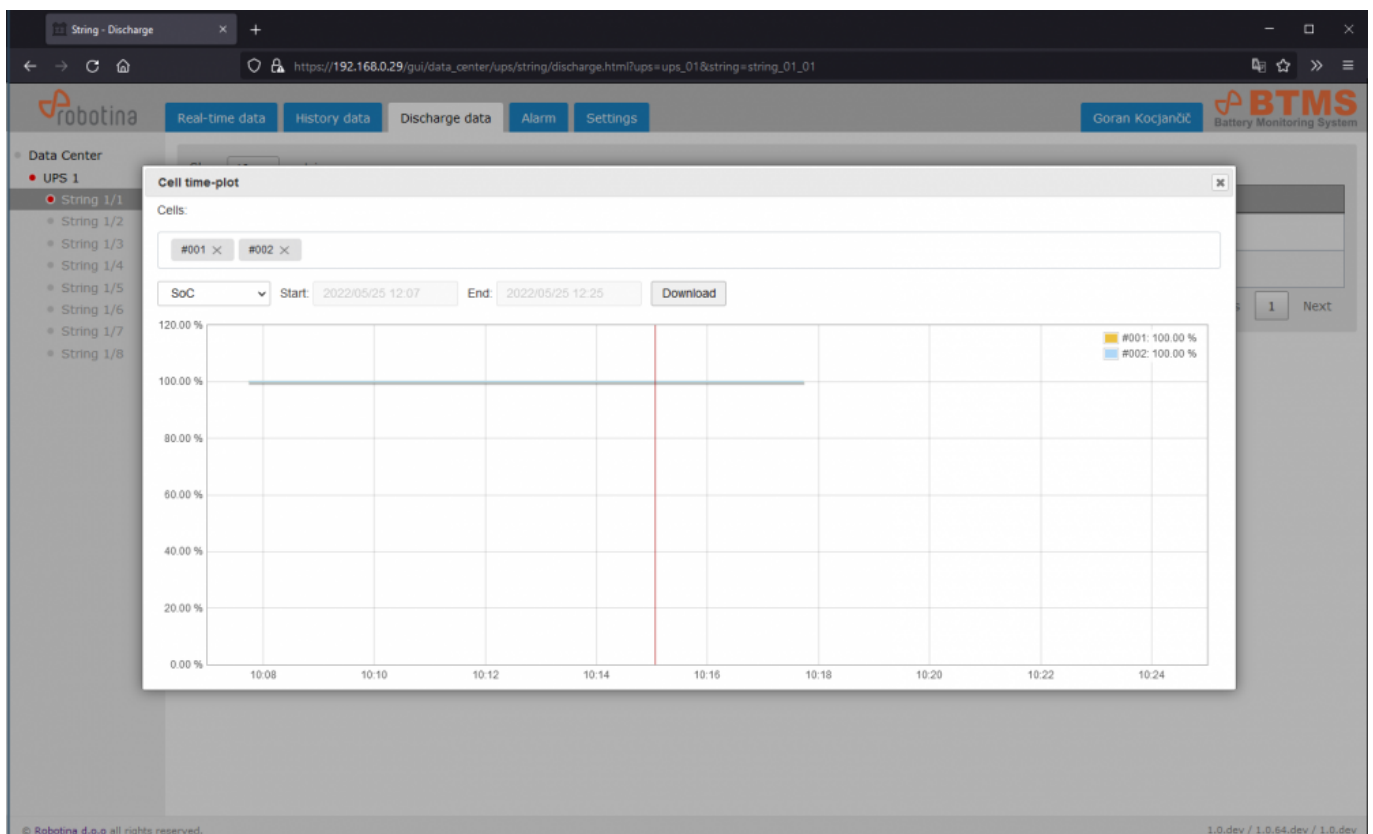
Previous 1 Next

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String time-plot



Cell time-plot



Alarm

The screenshot shows the 'Alarm' tab in the BTMS interface. The left sidebar shows the navigation tree: Data Center > UPS 1 > String 1/1. The main content area displays a table of alarm entries. The table has columns for #, Cell, From, To, Alarm, and Status. The first entry (row 14) is 'Temperature high' with status 'active'. The other 13 entries have status 'gone'. Below the table, it says 'Showing 1 to 10 of 14 entries'. The bottom of the page shows the Robotina logo and version information: 1.0.dev / 1.0.64.dev / 1.0.dev.

#	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

Settings

The screenshot shows the 'Alarm settings' page in the BTMS interface. The left sidebar shows the navigation tree: Data Center > UPS 1 > String 1/1. The main content area is titled 'Alarm settings' and contains a table with settings for SMS and e-mail notifications. The settings are organized into two sections: 'String' and 'Cell'. The 'String' section has 6 settings, all of which are checked for both SMS and e-mail. The 'Cell' section has 6 settings, all of which are unchecked for both SMS and e-mail.

	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	☐	☐

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