

# iC SmartView

## User Manual



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# 1 Introduction

The iC SmartView is an app designed for the iSMA CONTROLLI HMI Android panels, offering comprehensive controllers management and seamless access throughout the building. The iC SmartView simplifies the process of managing credentials with a primary focus on facilitating easy logins and access to Niagara stations and other HTML5 web servers, thereby enhancing building maintenance and management. Once entered, the credentials for the Niagara station or controller's web server need only be input once, as the app ensures that users are automatically logged back in with each log-out or restart of the Android panel. When operating in the Kiosk mode, the application becomes dedicated to this specific purpose, preventing the use of any other applications on the panel. To exit the Kiosk mode, a password is required, ensuring controlled access to the device. The application offers remote management of its functions using rest API, which allows remote control of the panel.

This user manual provides an in-depth exploration of iC SmartView's features.

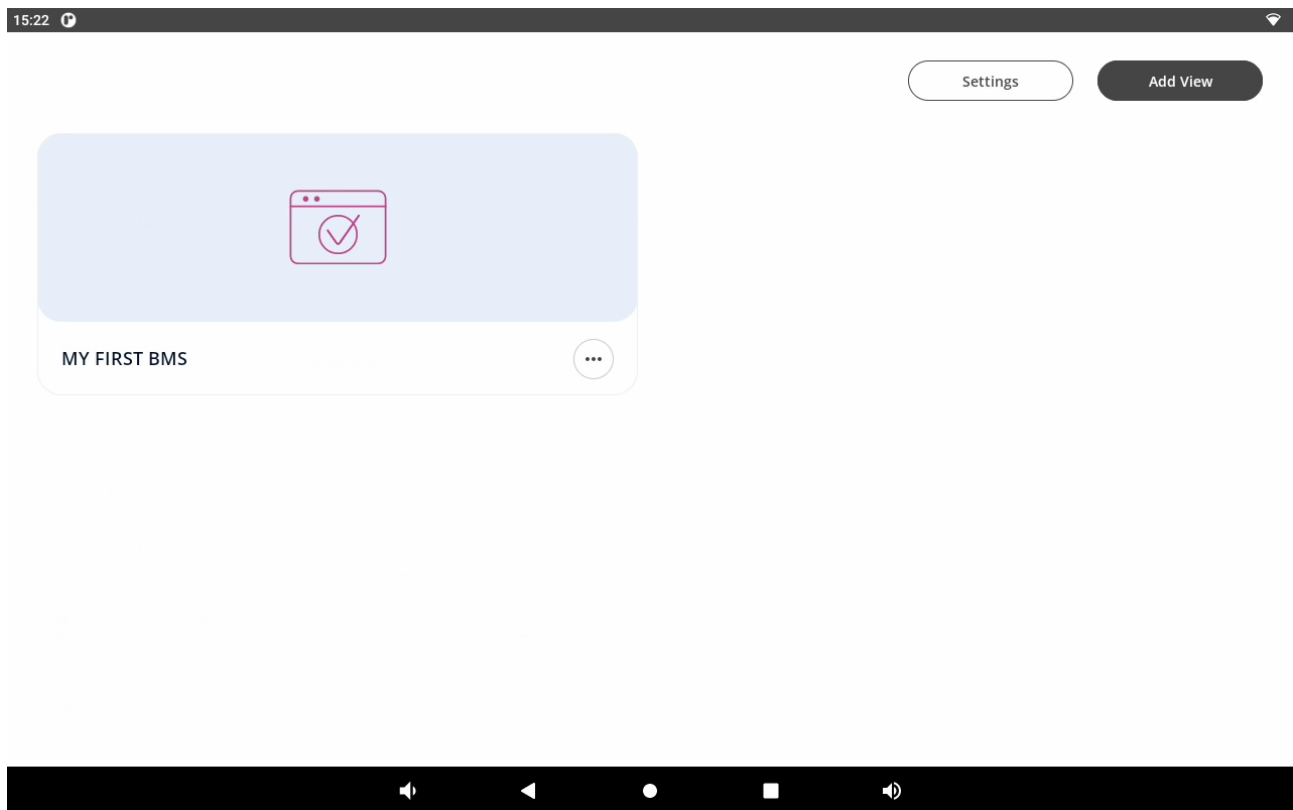


Figure 1. iC SmartView app

## 1.1 Revision History

Rev.	Date	Description
5.2	4 Dec 2024	<ul style="list-style-type: none"> <li>• Updated Remote Management section:                             <ul style="list-style-type: none"> <li>◦ web service</li> <li>◦ iC SmartView Config service</li> <li>◦ Rest API</li> </ul> </li> <li>• Added new option in UI settings (Bring back to the foreground)</li> </ul>

Rev.	Date	Description
5.1	8 Mar 2024	Updated information about reinstalling application after factory defaults reset
5.0	10 Nov 2023	New edition of the application under new name - iC SmartView <ul style="list-style-type: none"> <li>• new design</li> <li>• full screen mode upgrade</li> <li>• auto-update function added</li> <li>• LED API added</li> <li>• screensaver</li> <li>• light and dark modes</li> </ul>
4.3	1 Dec 2022	Rest API V2.0.0 support
4.2	25 May 2022	Rebranded
4.1	14 Oct 2021	Added note in the Autologin part
4.0	22 Jun 2021	Fourth edition: <ul style="list-style-type: none"> <li>• Autologin feature added</li> </ul>
3.1	4 Nov 2020	Application languages added
3.0	22 Jul 2020	Third edition
2.0	6 Dec 2019	Second edition
1.0	26 Aug 2019	First edition

Table 1. Revision history

## 2 Quick Start Guide

Getting started with iC SmartView is convenient and easy with the Quick start guide. It provides an overview of the application's key features, allowing users to take full advantage of its potential.

### 2.1 Access

The Quick start guide is available from a separate tile or, if deleted, from the device settings.

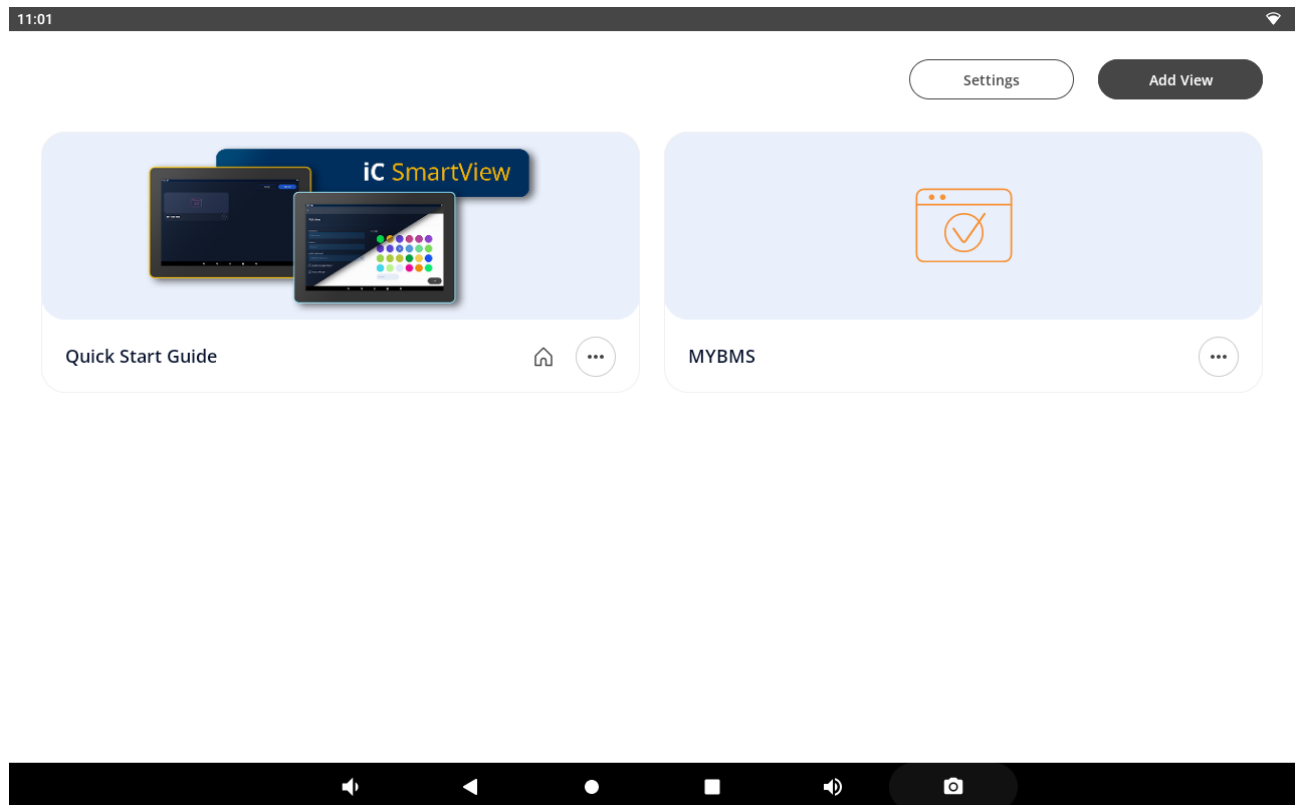


Figure 2. Quick start guide view - access from a tile

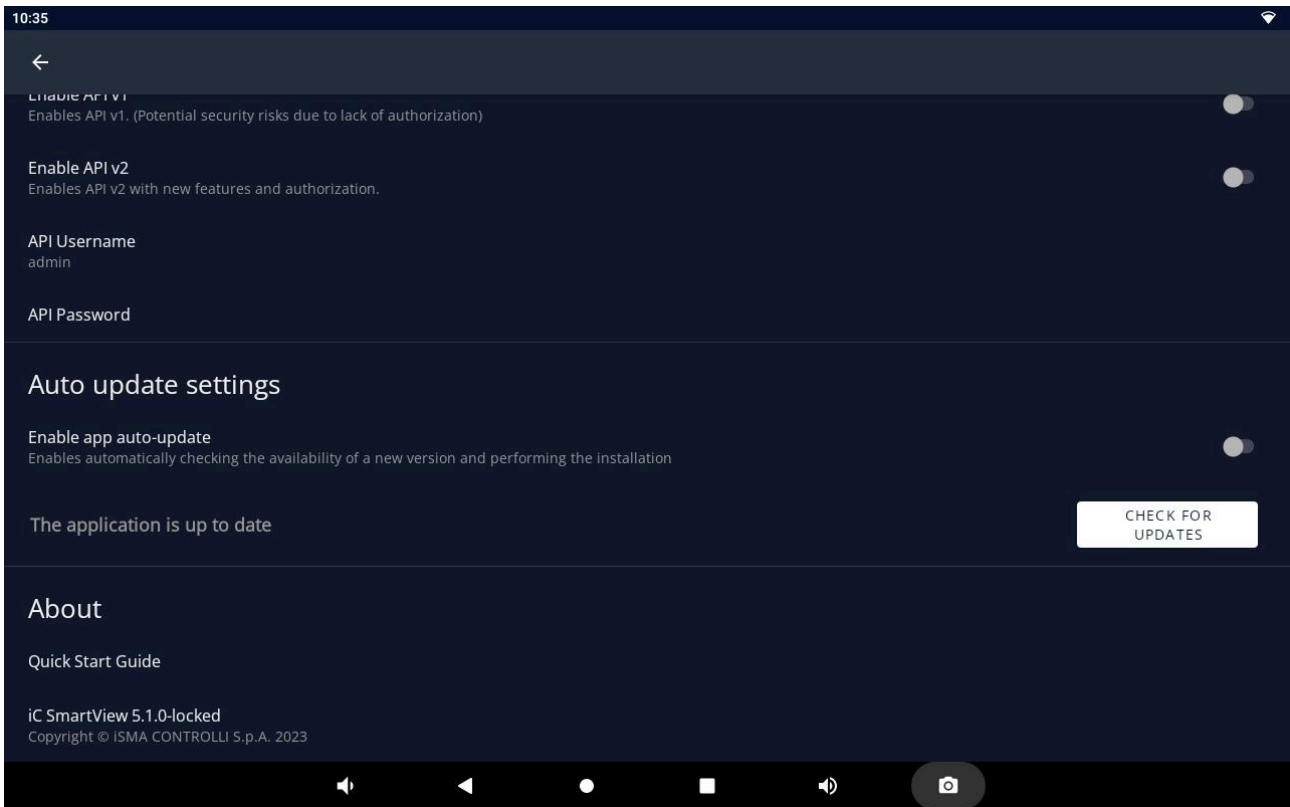


Figure 3. Quick start guide - access in settings

## 2.2 Features

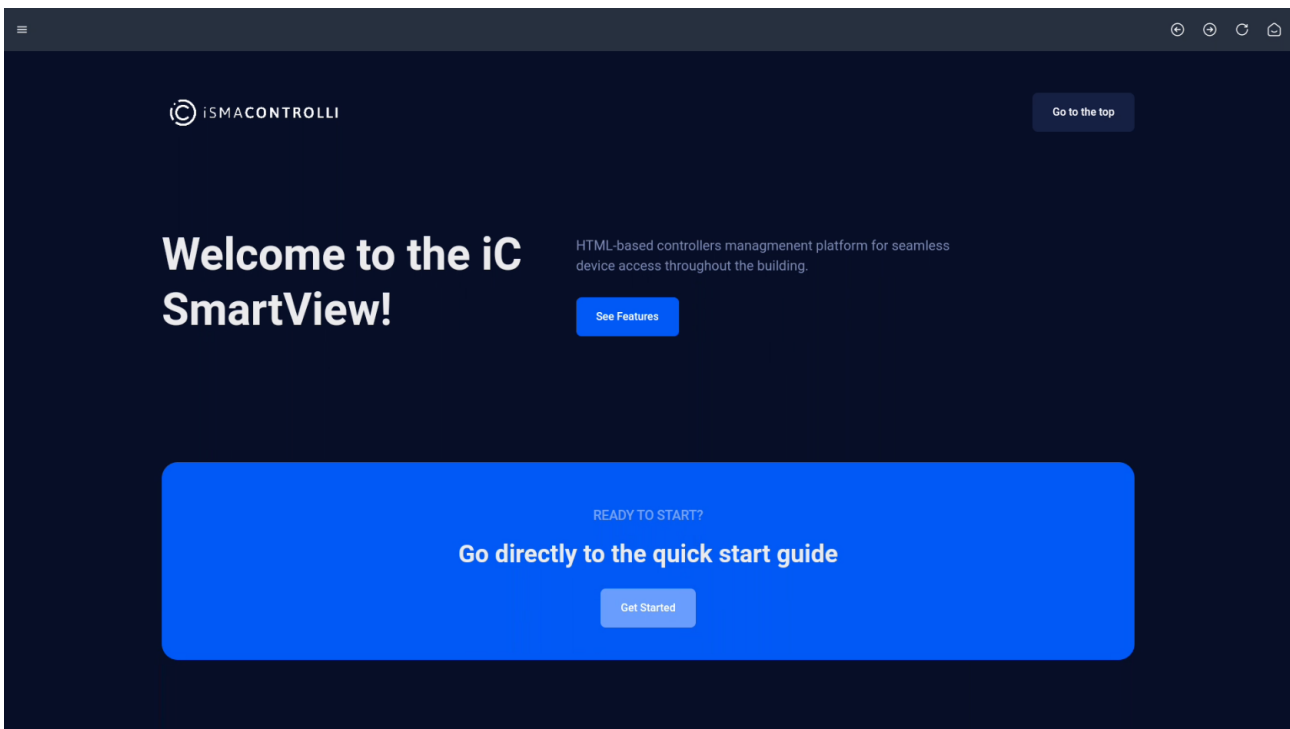


Figure 4. Initial page of the Quick start guide

The Quick start guide describes the application's features and includes quick-start steps and videos for the following actions:

- adding a new view:

- customizing a tile,
- auto-login,
- PIN protection,
- home view;
- UI configuration:
  - hiding a navigation bar;
  - hiding a system navigation;
  - switching on a screensaver;
  - switching a theme mode;
- kiosk mode:
  - accessing kiosk mode settings;
  - restricting panel access;
  - setting kiosk unlock password;
  - managing connections in the kiosk mode;
- import/export settings:
  - accessing import/export settings;
  - saving application settings;
  - importing saved settings;
- secure remote management:
  - remote management using Rest API, web server, iC SmartView Config service,
  - accessing and enabling remote management;
- auto update:
  - accessing auto update settings;
  - enabling automatic version checks;
  - manually checking for updates.



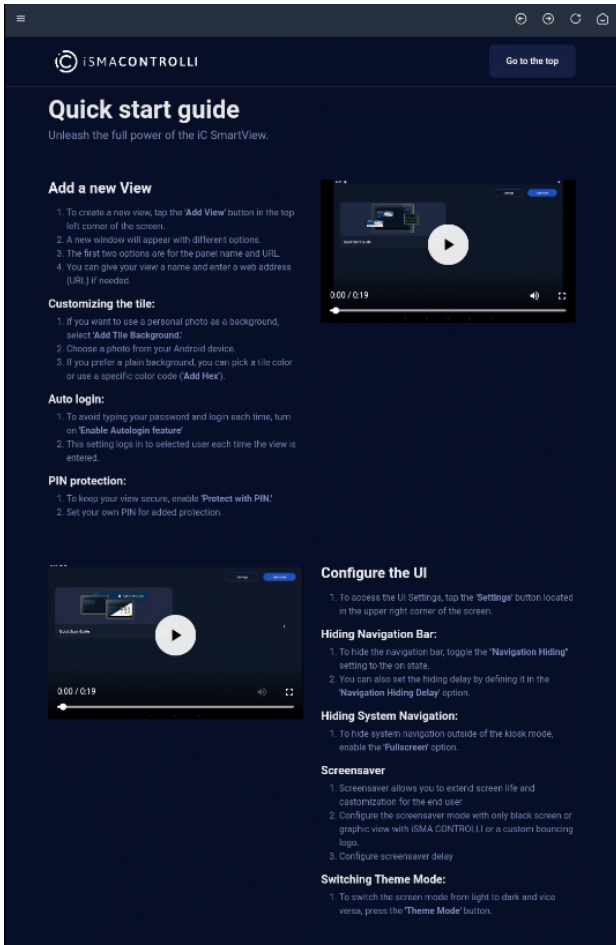


Figure 5. Quick start guide features

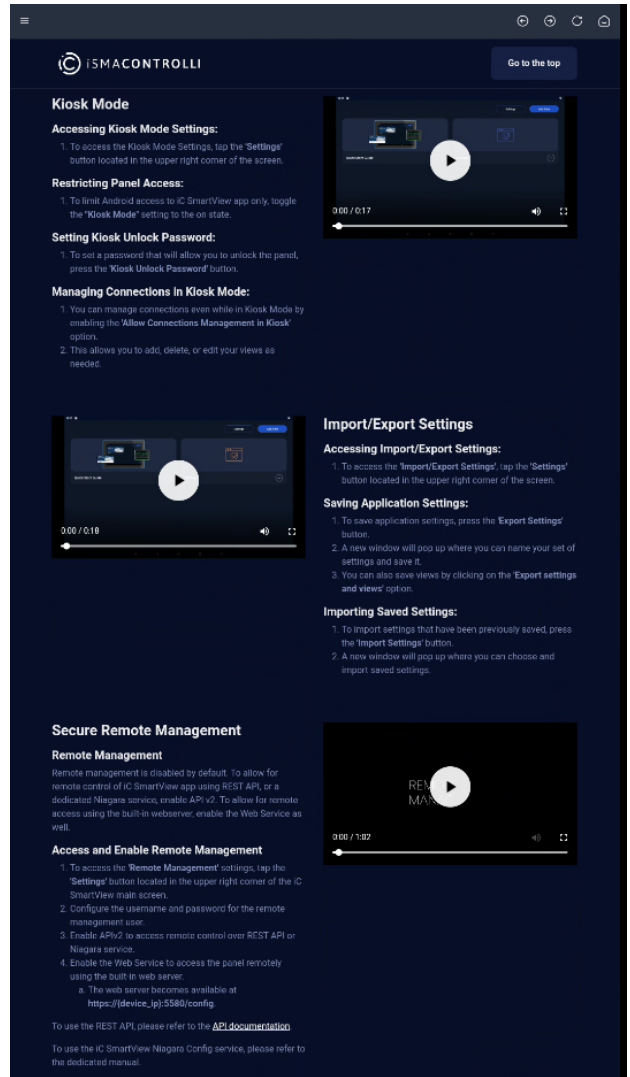


Figure 6. Quick start guide features

## 3 Installation

### 3.1 Pre-installed

The iC SmartView application is exclusively designed to be installed on iSMA CONTROLLI branded Android panels. To enhance user convenience, this application comes pre-installed on every panel, ensuring seamless accessibility from the moment of power-up.

**Note:** The application includes a built-in auto-update feature, which has been available since the 5.0 version.

This feature is, by default, disabled to provide users with control over updates. However, when an Internet connection is available, users can conveniently update the application directly from within the application itself, ensuring that they always have access to the latest enhancements and security updates.

### 3.2 After Factory Defaults Reset

In the event that the panel is reset to factory defaults, it is required to reinstall the iC\_SmartView.apk from a PC using a USB cable:

**Step 1:** Download the iC SmartView application from the [iSMA CONTROLLI Download Center](#).

**Step 2:** Connect a USB cable to the PC and to the panel (USB 3.0 slot). Wait for the PC to recognize the device and install drivers.

**Step 3:** Open the folder with the application.

**Step 4:** Double click on install.bat file—the application will be installed automatically on the connected panel.

**Step 5:** The last step is to set the application as the Home app.

## 4 Settings

The Setting button in the top right corner of the main view opens the application settings:

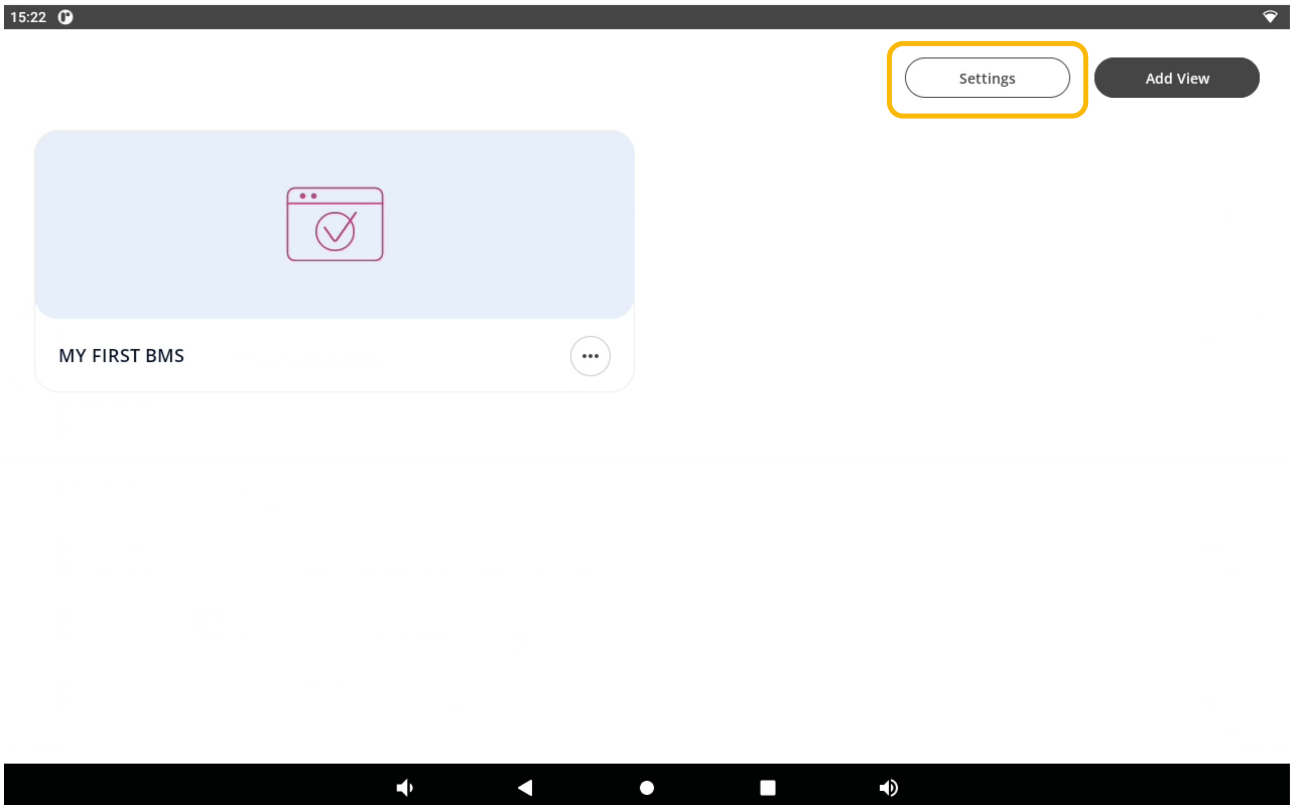


Figure 7. Settings button

Available settings:

- UI (Navigation, Screensaver, Theme)
- Kiosk Mode
- Lighting Color
- Pin Lock
- Import/Export
- Auto Restart
- Remote Management
- Updates

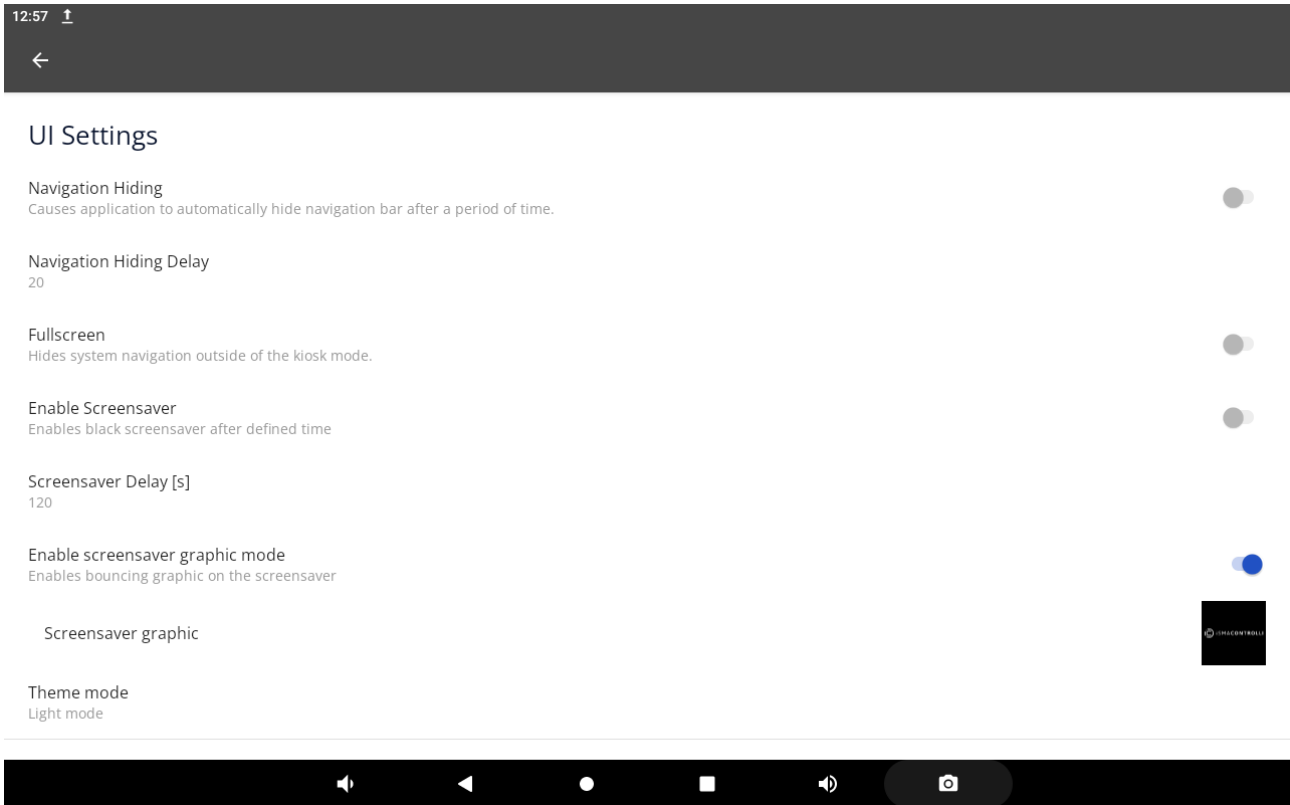


Figure 8. Settings, part 1

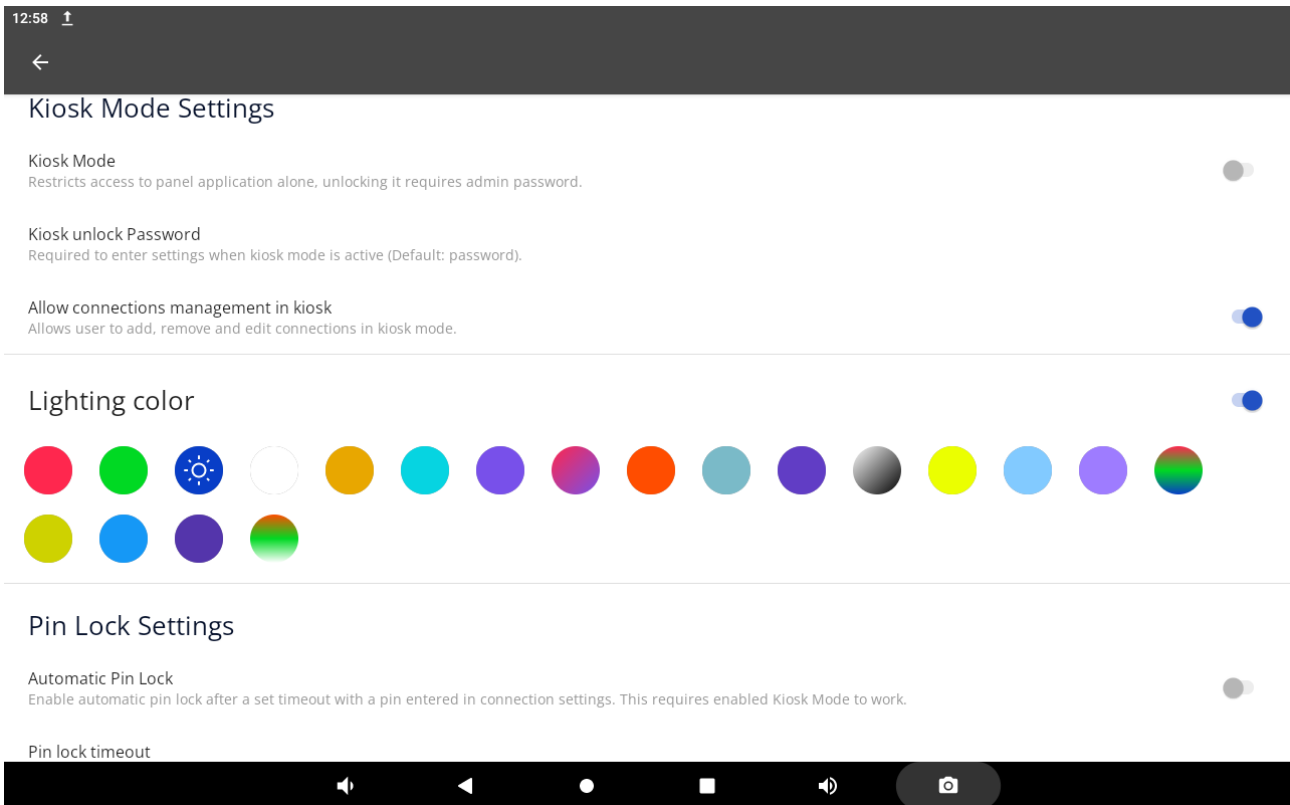


Figure 9. Settings, part 2

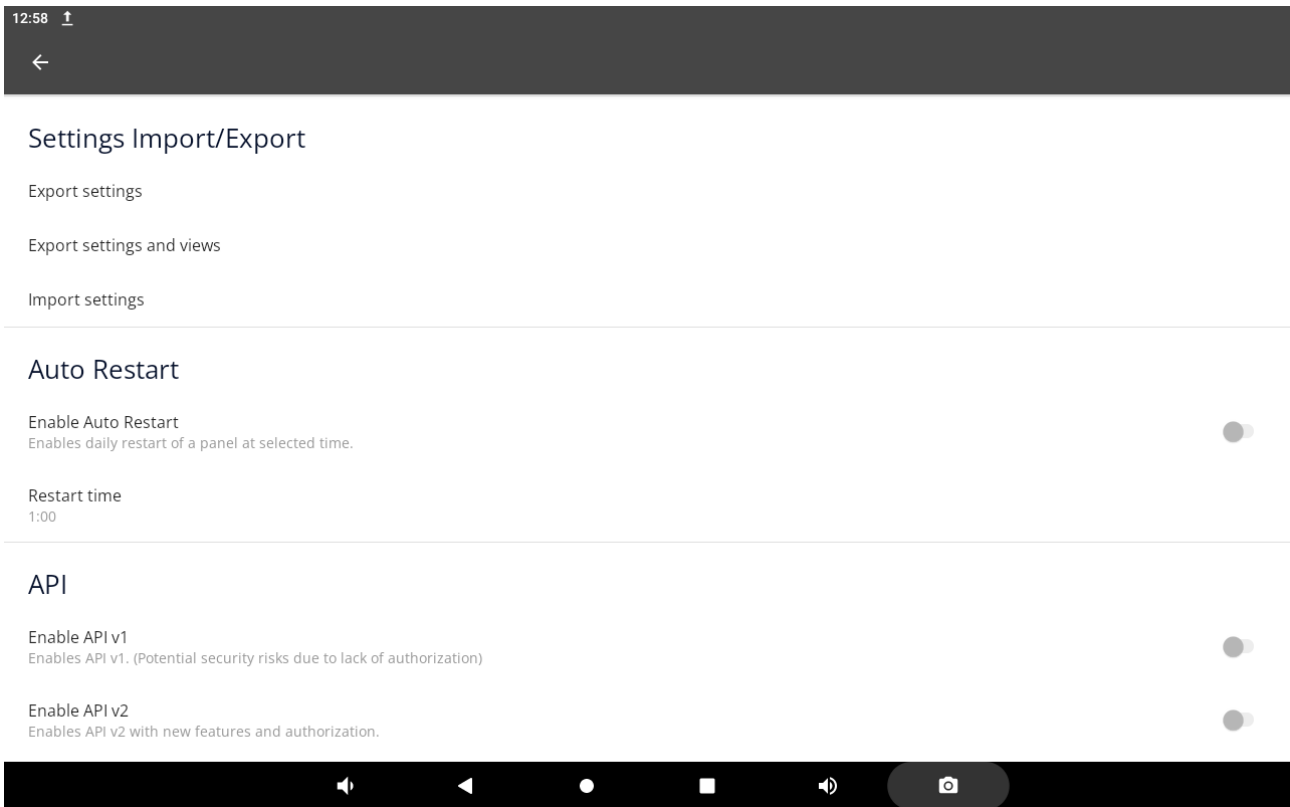


Figure 10. Settings, part 3

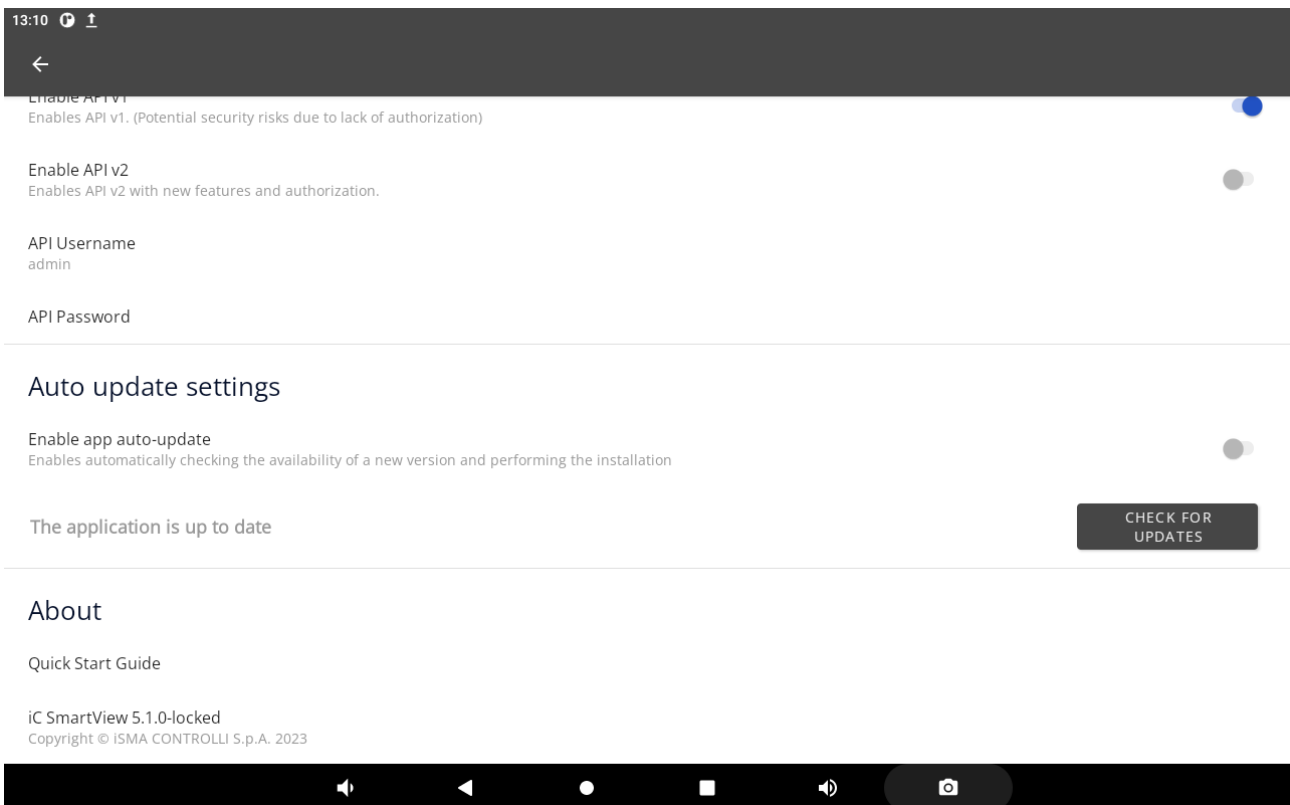


Figure 11. Settings, part 4

## 4.1 UI (Navigation, Screensaver, Theme)

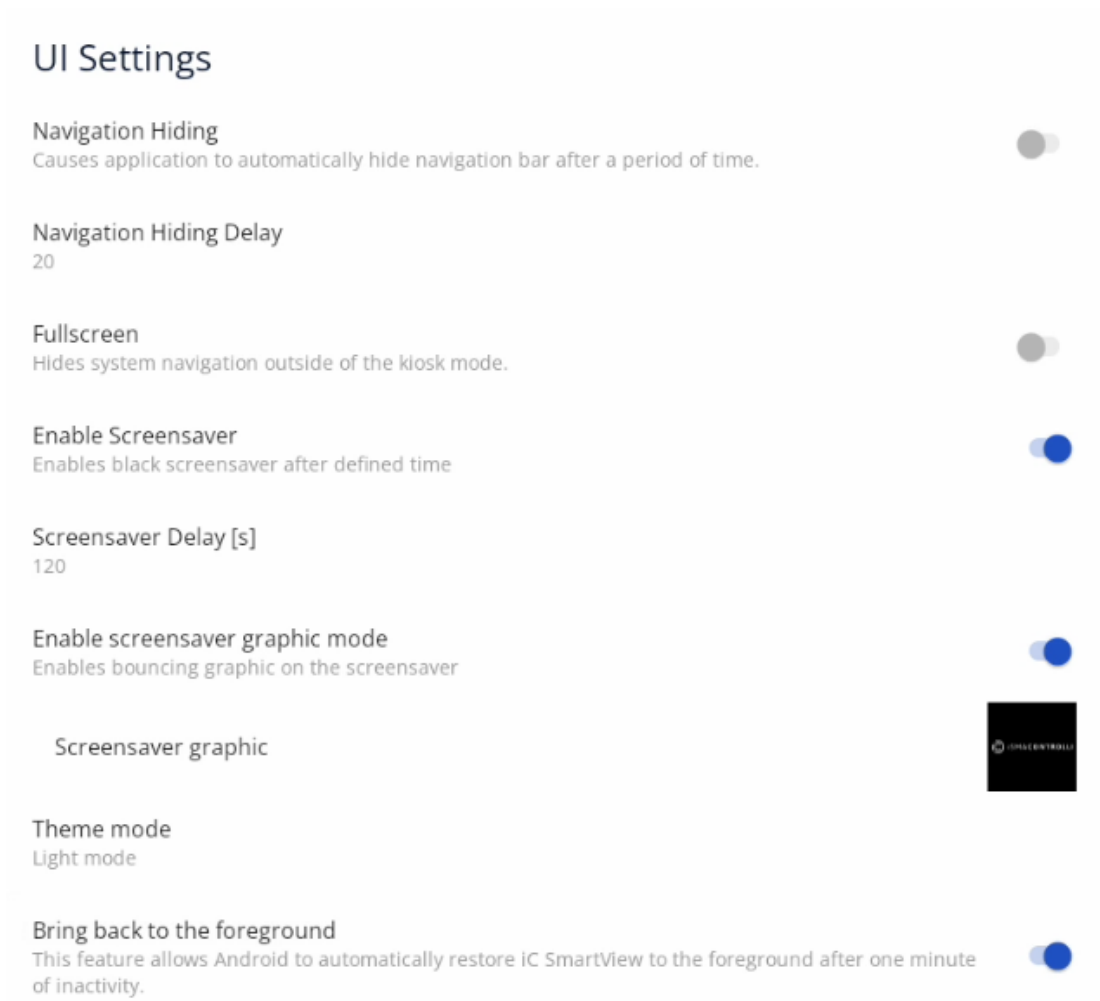


Figure 12. UI settings

The UI settings allow to adjust the following elements:

- **Navigation hiding**: causes the application to automatically hide a navigation bar after a set period of time;
- **Navigation hiding delay**: sets time after which the navigation bar is hidden;
- **Fullscreen**: hides system navigation outside of the kiosk mode;
- **Enable screensaver**: allows to switch on a screensaver after a set period of inactivity;
- **Screensaver delay [s]**: allows to set the time of inactivity after which the screensaver is started;
- **Enable screensaver graphic mode**: allows to switch on a graphic mode on a screensaver (with a floating graphic file);
- **Screensaver graphic**: allows to select a file, which will be floating on a screensaver; by default, it is the iSMA CONTROLLI logo; supported formats: .png, .jpg;

**Note:** In order to bring back a default graphic on a screensaver, uncheck the Enable screensaver graphic mode (disabling it), and enable it again.

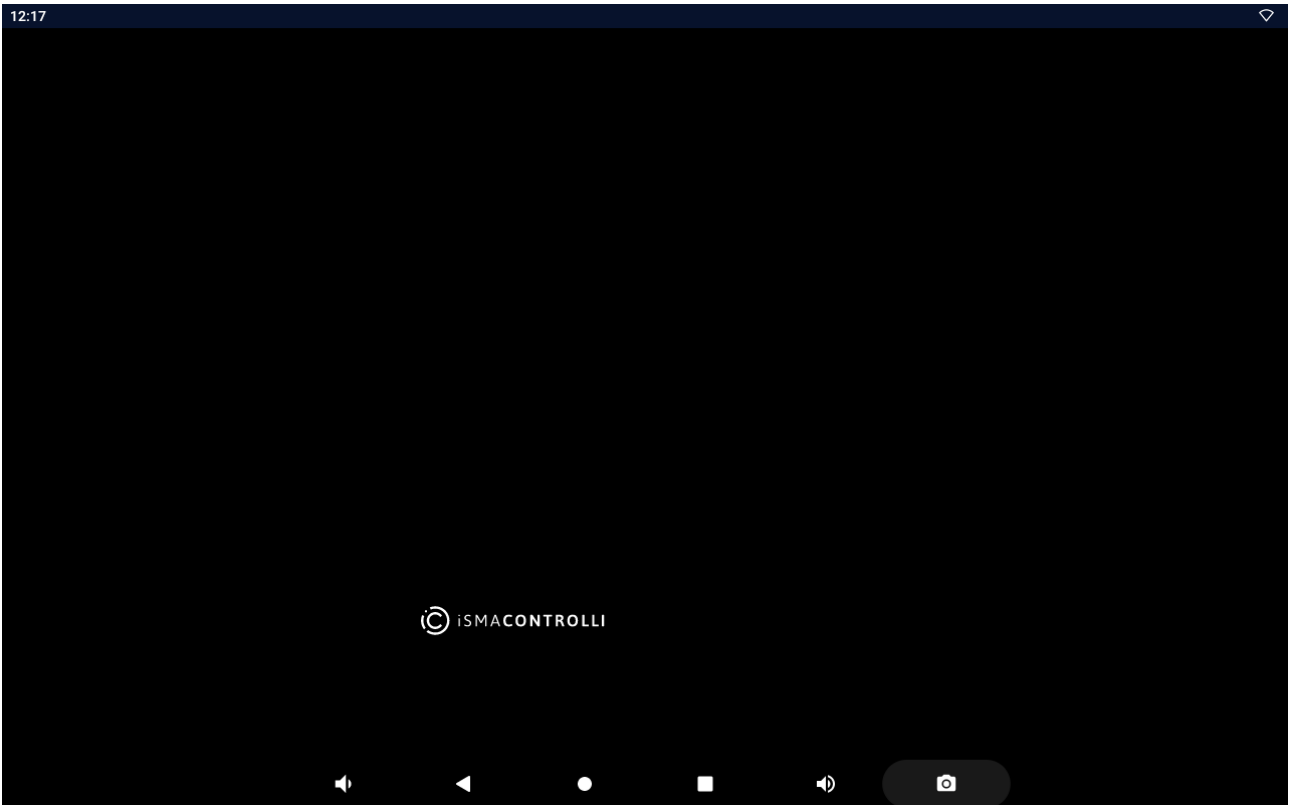


Figure 13. Screensaver with a floating graphic

- **Theme mode:** allows to switch between a light and dark (default) mode of the application (or allows to set the panel's default setting).

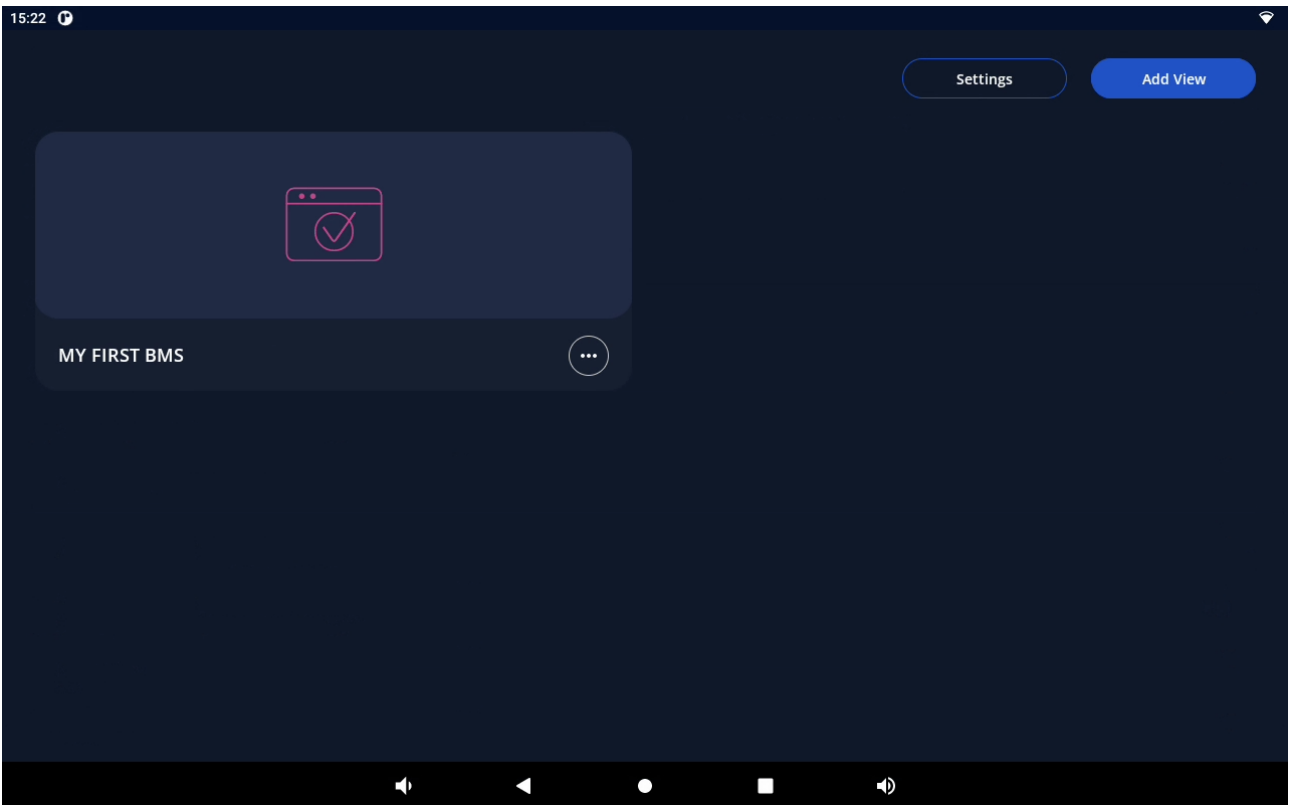


Figure 14. Example of the dark mode

- **Bring back to the foreground:** allows to bring back iC SmartView to the foreground after one minute of inactivity; this function protects against accidental and non-accidental closing of the application while in operation.

## 4.2 Kiosk Mode

**Kiosk mode:** disables access to Android and restricts a panel access to the iC SmartView application only. Unlocking requires an admin password.

**Warning:**

Remember to save the created password in a safe place. It is not possible to restore the password once lost without factory settings of the device.

The kiosk mode settings allow to switch the kiosk mode on and off, set the admin password to unlock it, and set access to connections in the kiosk mode.

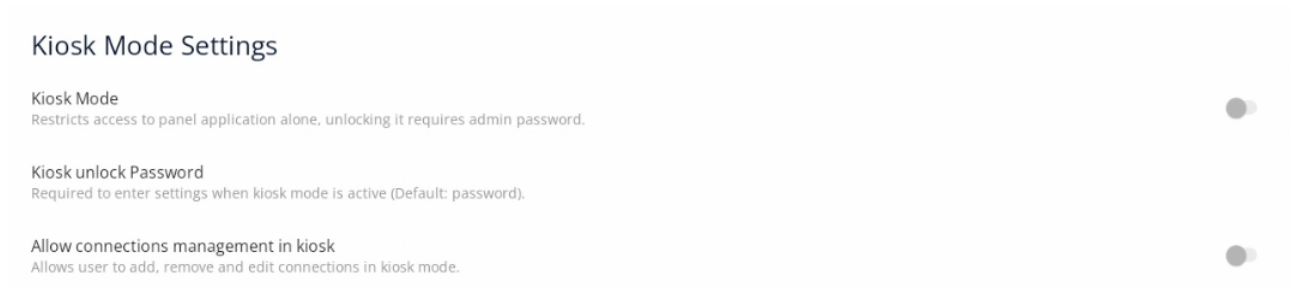


Figure 15. Kiosk mode settings

- **Kiosk mode:** switches the kiosk mode on and off;
- **Kiosk unlock password:** allows to set a password required to access settings when the kiosk mode is active;
  - Default password: password

**Note:** While setting the unlock password, it is required to type it twice for confirmation.

- **Allow connections management in kiosk:** allows the user to add, remove, and edit connections in the kiosk mode.

## 4.3 Lighting Color

**Note:** Available only on panels equipped with the LED bar.

The Lighting color settings allow to switch on and off and choose the color of the panel's LED lighting. Setting the lighting color is also available using the Rest API. Please refer to the Rest API manual.

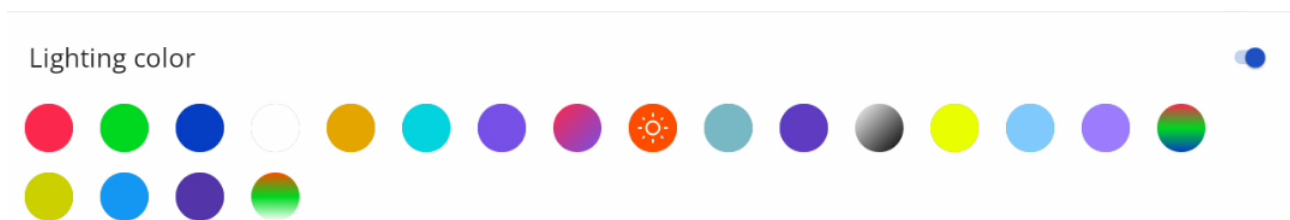


Figure 16. Lighting color settings

## 4.4 Pin Lock

PIN lock settings allow a tile, where PIN option is enabled, to lock the web view after a specified period of time. This option requires enabled kiosk mode to work.



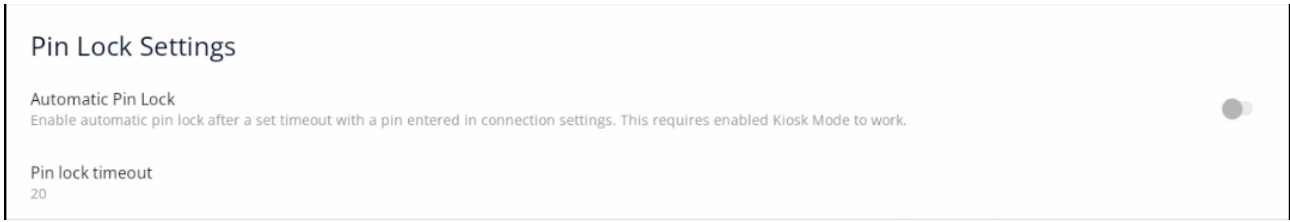


Figure 17. Pin lock settings

- Automatic pin lock: switches the pin lock on and off;
- Pin lock timeout: allows to set the time after which entering pin is required.

## 4.5 Import/Export

### 4.5.1 Export of Settings

The Export option allows to export application settings or settings and views to a .json file.

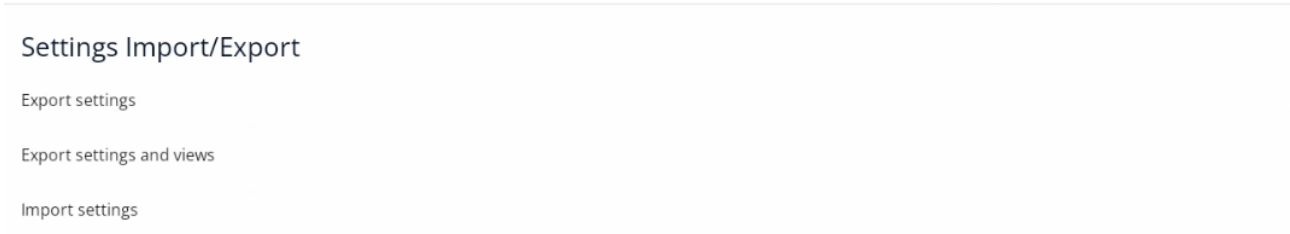


Figure 18. Import/export settings

To export application settings, follow the below steps:

**Step 1:** Select the Export settings or Export setting with views (exports settings along with connection data).



Figure 19. Export settings

**Step 2:** New window shows up. A default name of the file is 'iSMA\_export.json' but it is freely editable; also at this point the user has to pick the location of the file (touch the three dashes icon in the left top corner of the screen).

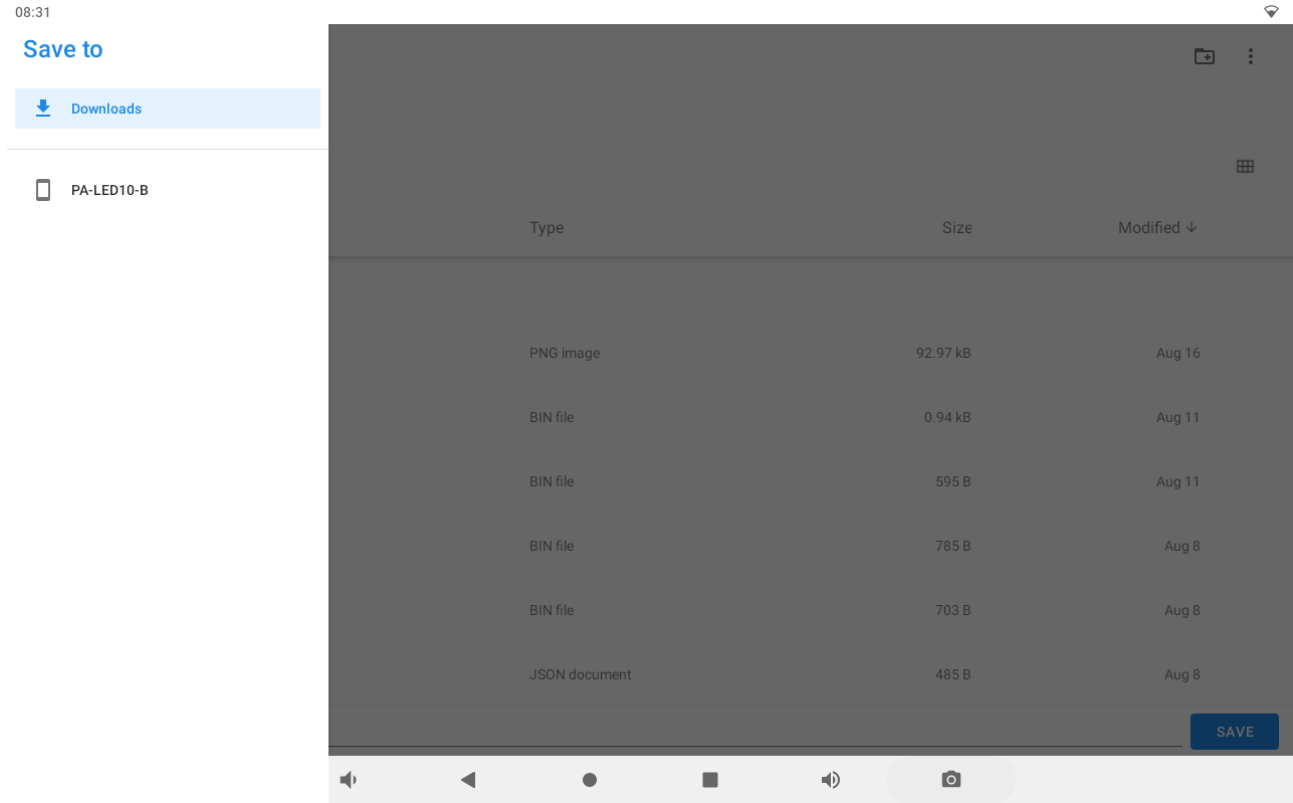


Figure 20. Changing saving location of the export file

## 4.5.2 Import of Settings

The Import option allows to import application settings or settings and views from a .json file.

To import application settings, follow the below steps:

**Step 1:** Select the Import settings.

**Note:** Importing settings overwrites current settings, including added connections.

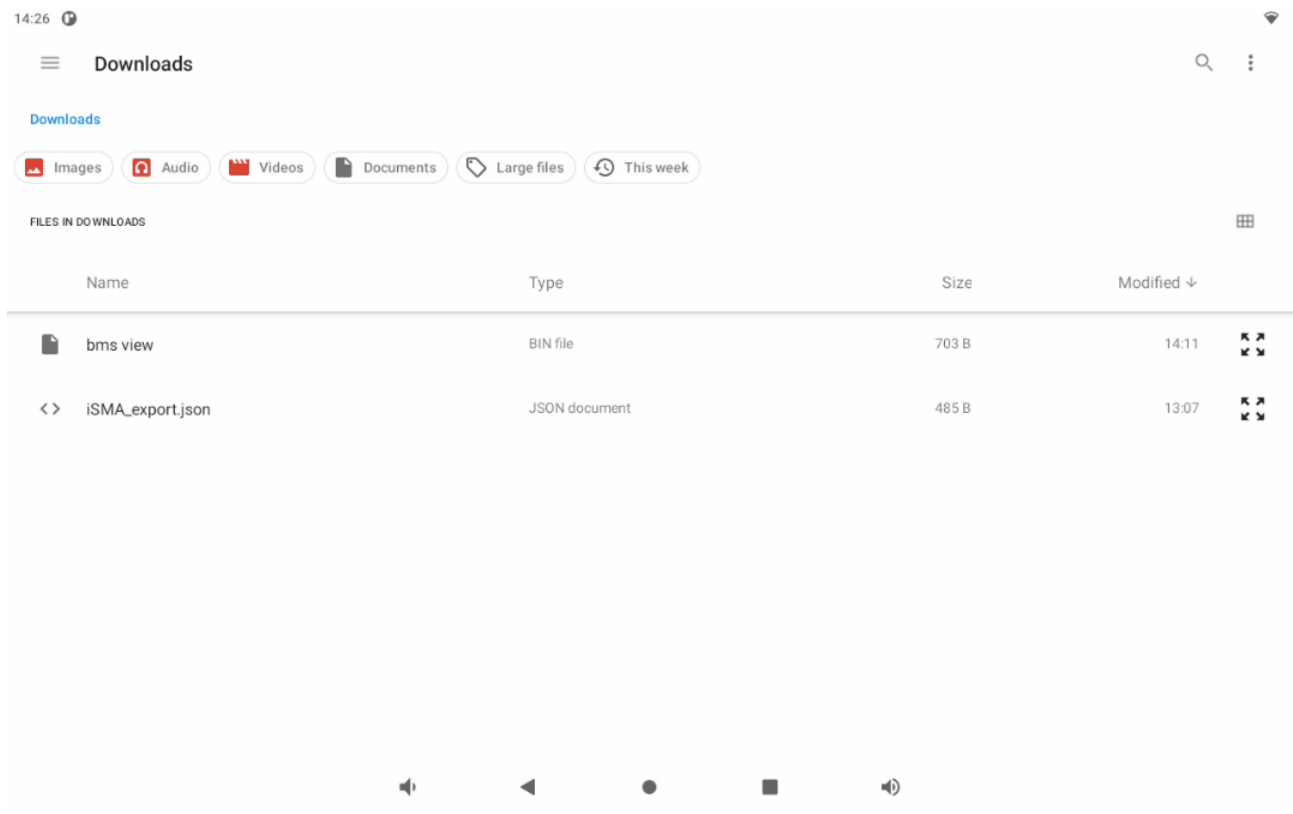


Figure 21. Import settings file location

**Step 2:** Choose a file to import (touch the three dashes icon in the left top corner of the screen); it can be downloaded from the panel or any other storage source connected to the panel.

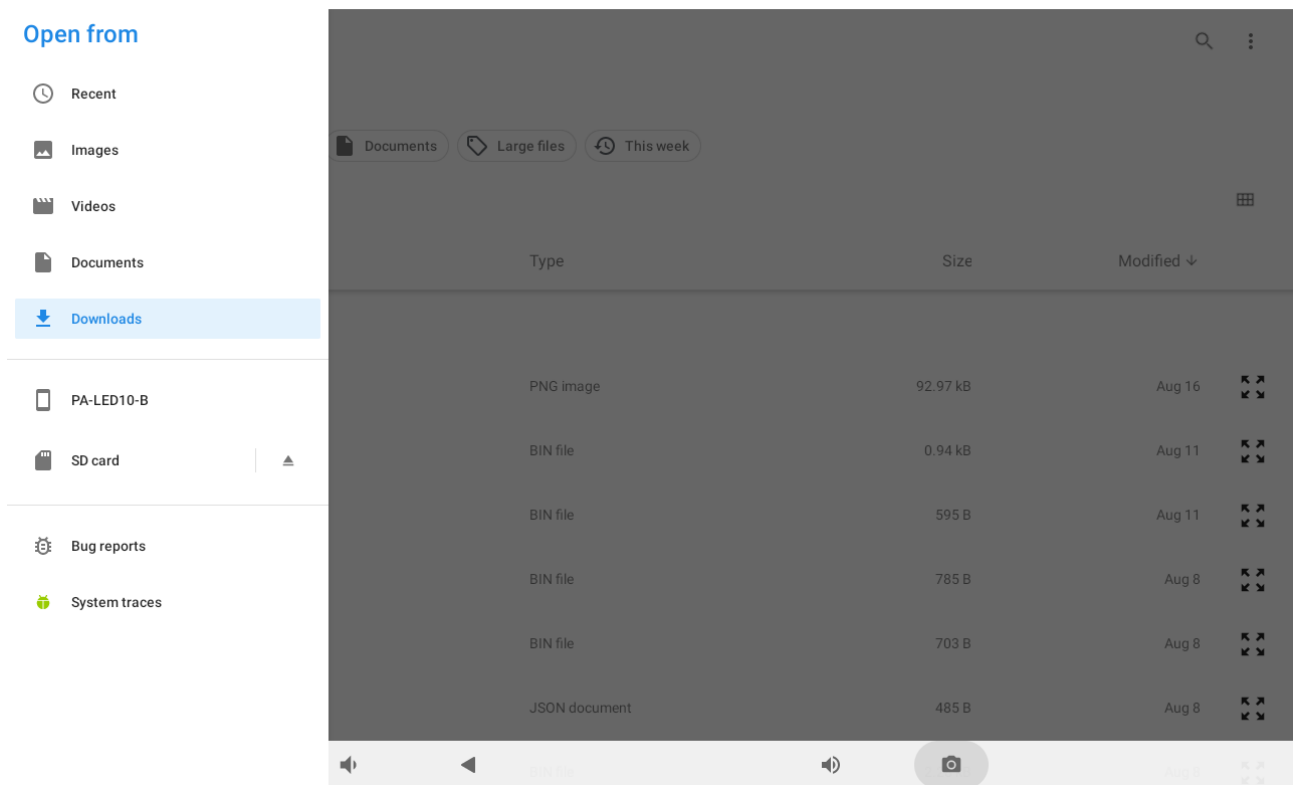


Figure 22. Import sources

## 4.6 Auto Restart

The auto restart function allows the device to restart automatically on a daily basis, according to a set schedule.

This function is useful in case of apparent slowdown of the device and visualization. Some web applications store cache files locally and in the device's RAM. Running the auto-restart option clears this memory at startup.

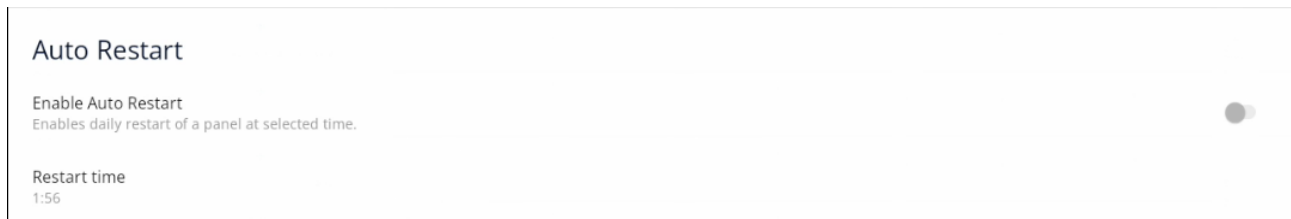


Figure 23. Auto restart

- **Enable auto restart:** switches the auto restart option on and off;
- **Restart time:** sets the time for auto restart.

## 4.7 Remote Management

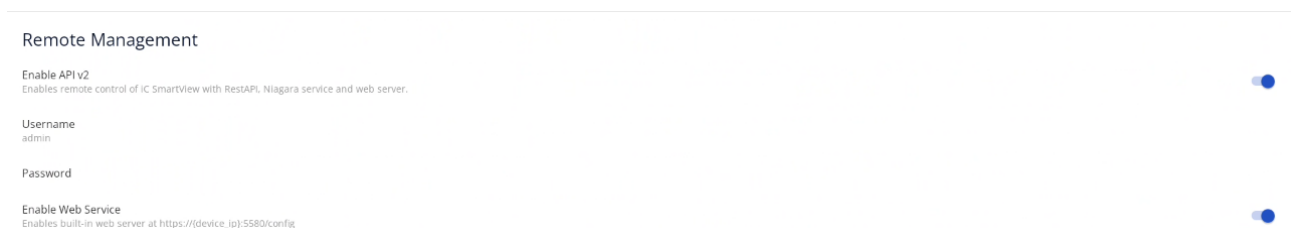


Figure 24. Remote Management settings

- **Enable API v2:** enables the Rest API V2.0.0. interface;
- **Username:** allows to set the username for the Rest API interface and web server;
- **Password:** allows to set the password for the Rest API interface and web server;
- **Enable Web Service:** enables the built-in web server at <https://device.ip:5580/config>.

## 4.8 Updates

### 4.8.1 Updating from the iSMA Android Application V4.2.0 to iC SmartView V5.1

**Step 1:** Download the latest version of the iC SmartView.apk to the PC or directly to the Android panel.

**Step 2:** Connect the panel to the PC or copy the iC SmartView.apk to the pendrive external memory.

**Step 3:** Copy the downloaded .apk file to the panel's internal memory.

**Step 4:** Open the file's location on the panel and open the .apk file. The upgrade is started automatically.

### 4.8.2 Auto Update

From the iC SmartView, it is possible to use the auto update function, which automatically checks the availability of a new version of application and performs the installation.

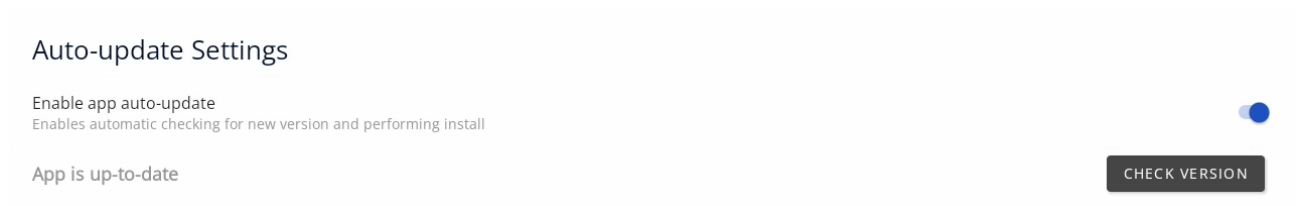


Figure 25. Auto update settings

- **Enable app auto update:** (disabled by default) switches the auto update function on and off;
- Check for updates button.

## 5 Web Views Management

### 5.1 Adding New Web View

Correct operation of web views in iC SmartView requires pre-configuration of the Ethernet port or WiFi network in the Android device settings. To configure the IP settings, select the Network & Internet option in the device settings.

When the application is first launched, the main screen, except for quick-start, does not contain any added visualization, or controller. When the application is launched, the home screen is displayed, allowing to add one or more Niagara stations, or other web services. To add a new view, tap the Add View button:

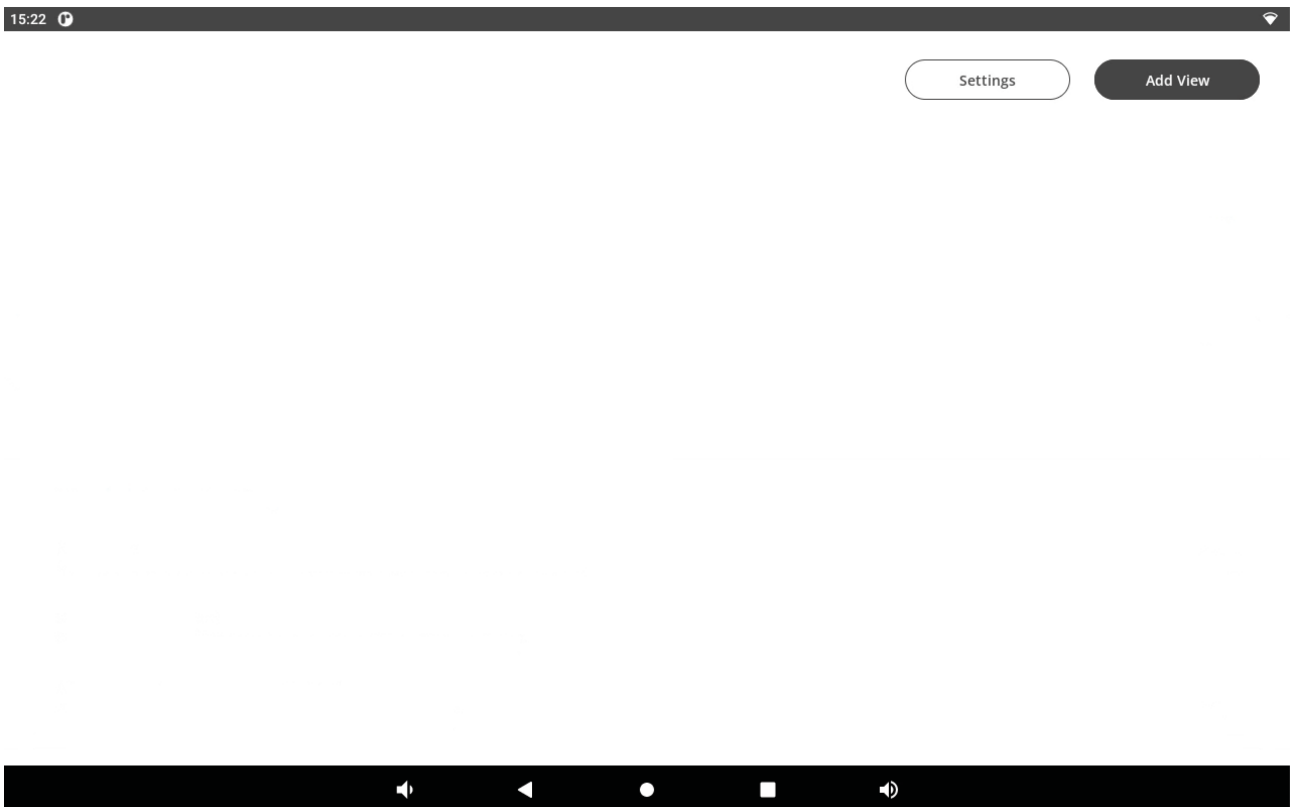


Figure 26. Main screen

Enter credentials:

- panel name;
- panel url

and save them. Then, select a tile background file or color (from a palette or entering a hex number).

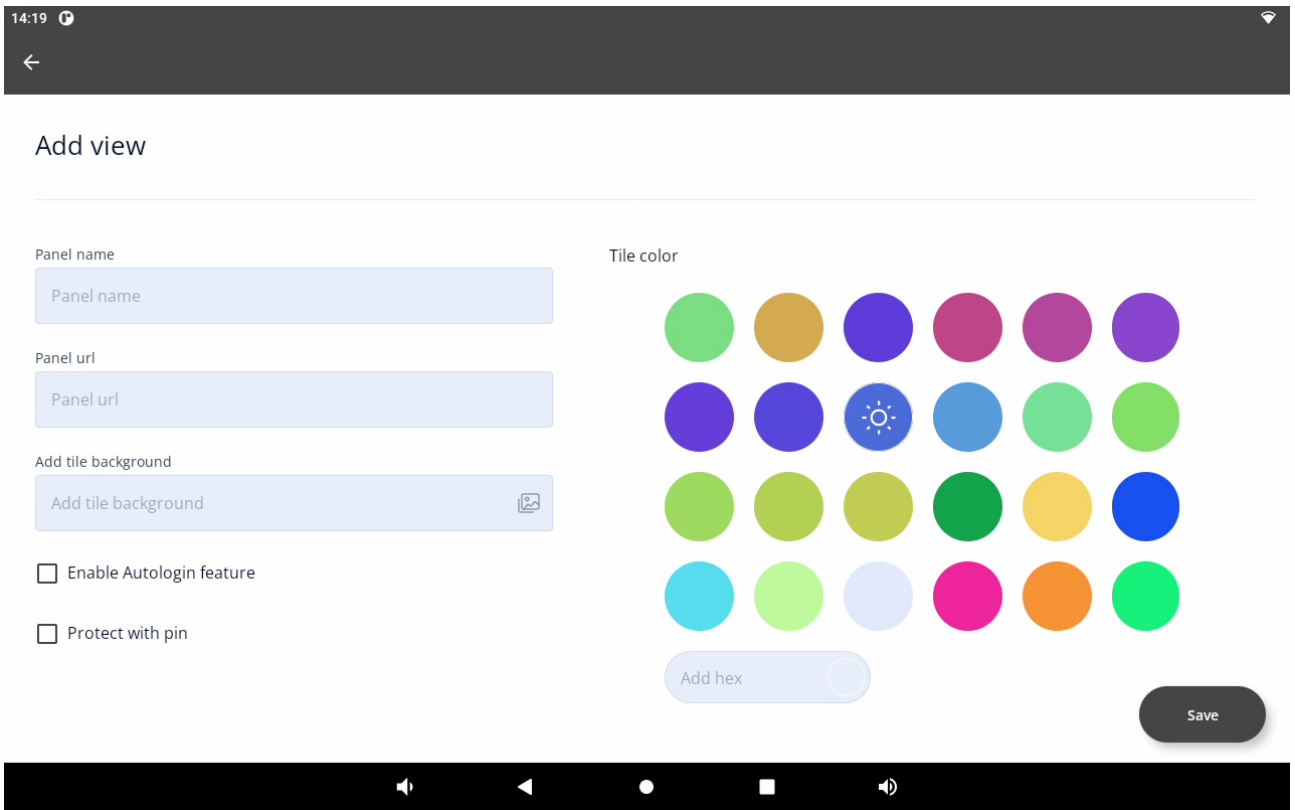


Figure 27. Credentials

Logging into the view is available with two options to check:

- Enable Autologin feature, and
- Protect with pin.

### 5.1.1 Autologin

Checking the Enable Autologin feature extends the username and password fields. Saved, the credentials are remembered, and the view is automatically logged from the panel. If the option remains unchecked, logging in is redirected to an external login website (Niagara or other).

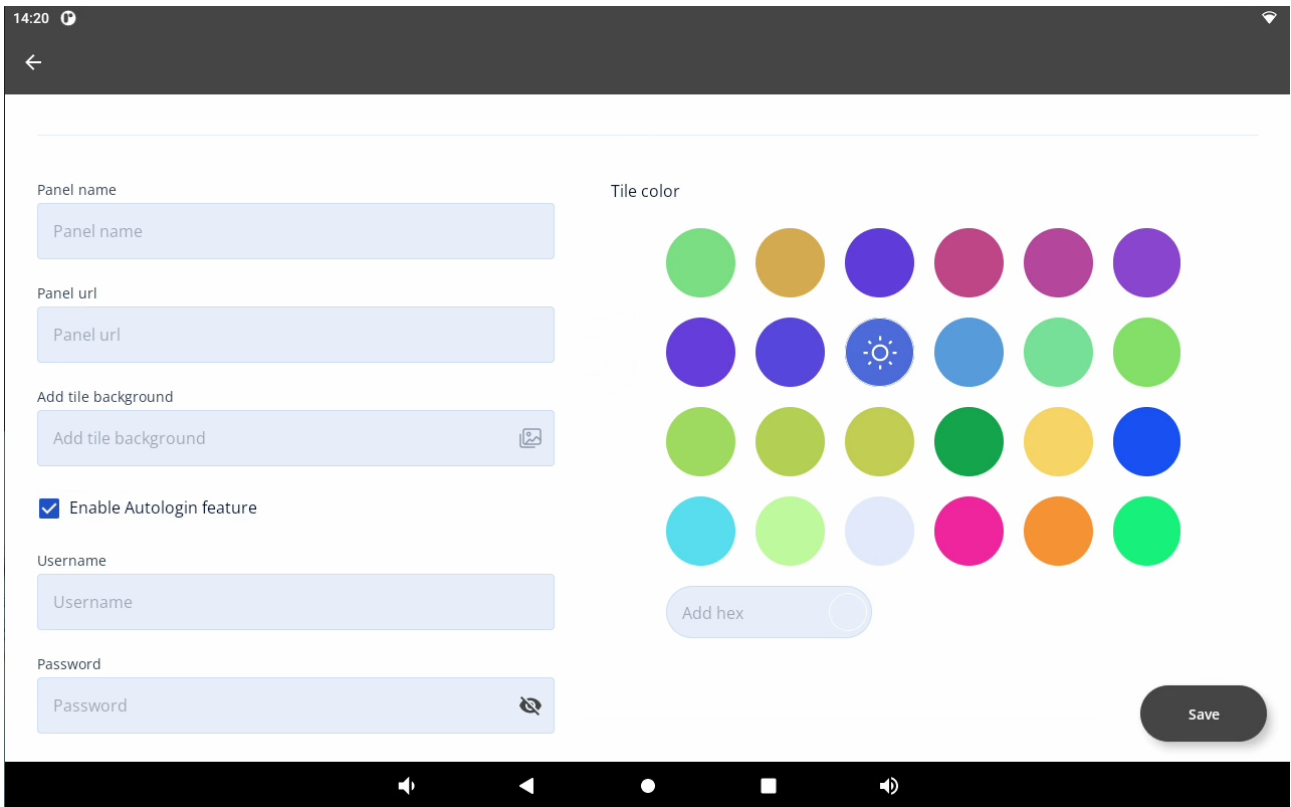


Figure 28. Autologin credentials

**Note:** In case auto-logging has been enabled and the connection to the web service does not work properly, it is recommended to leave the option unchecked, which redirects to the web service login page and allows logging in there. Note that the iC SmartView application supports logging into HTML5-based devices.

**Note:** In case of issues while opening the login page, please add the “/login.html” or “/prelogin” or any other known part at the end of the web service’s url, that leads directly to the user login page.

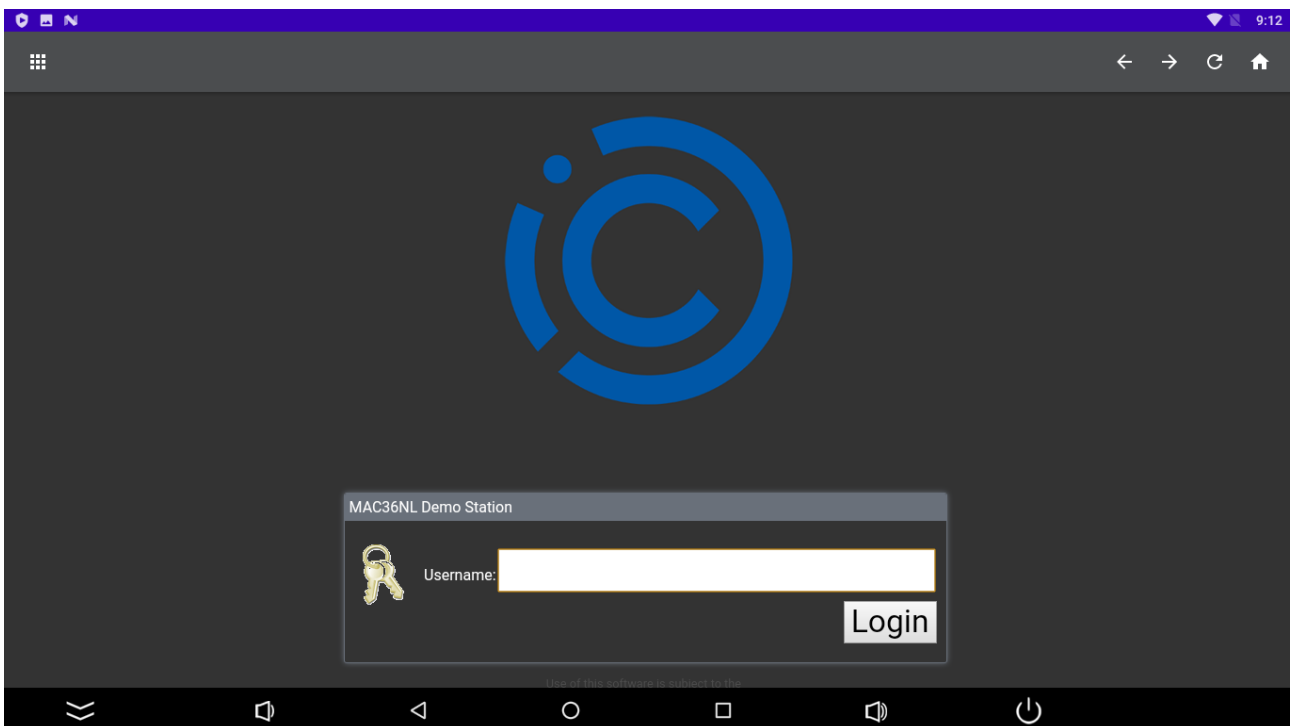


Figure 29. Niagara login website enabling logging into any controller with HTML5 graphics



**Note:** To enable a proper functioning of autologin, please remember to add a port number after a panel's IP address:

- :443 for https connection;
- :80 for http connection,

For example: <https://168.192.1.1:443>.

**Note:** Selecting the autologin feature is available from the iSMA Android Application 4.0.

### 5.1.2 PIN Protection

Checking the Protect with pin option enables the selected tile to require entering a pin number when attempting to open it.

**Note:** If the PIN lock timeout option in settings is enabled, then the PIN will be required also after a set time of inactivity in the Kiosk mode. Go to the Kiosk mode settings for more information about entering the Kiosk mode and setting the pin lock timeout.

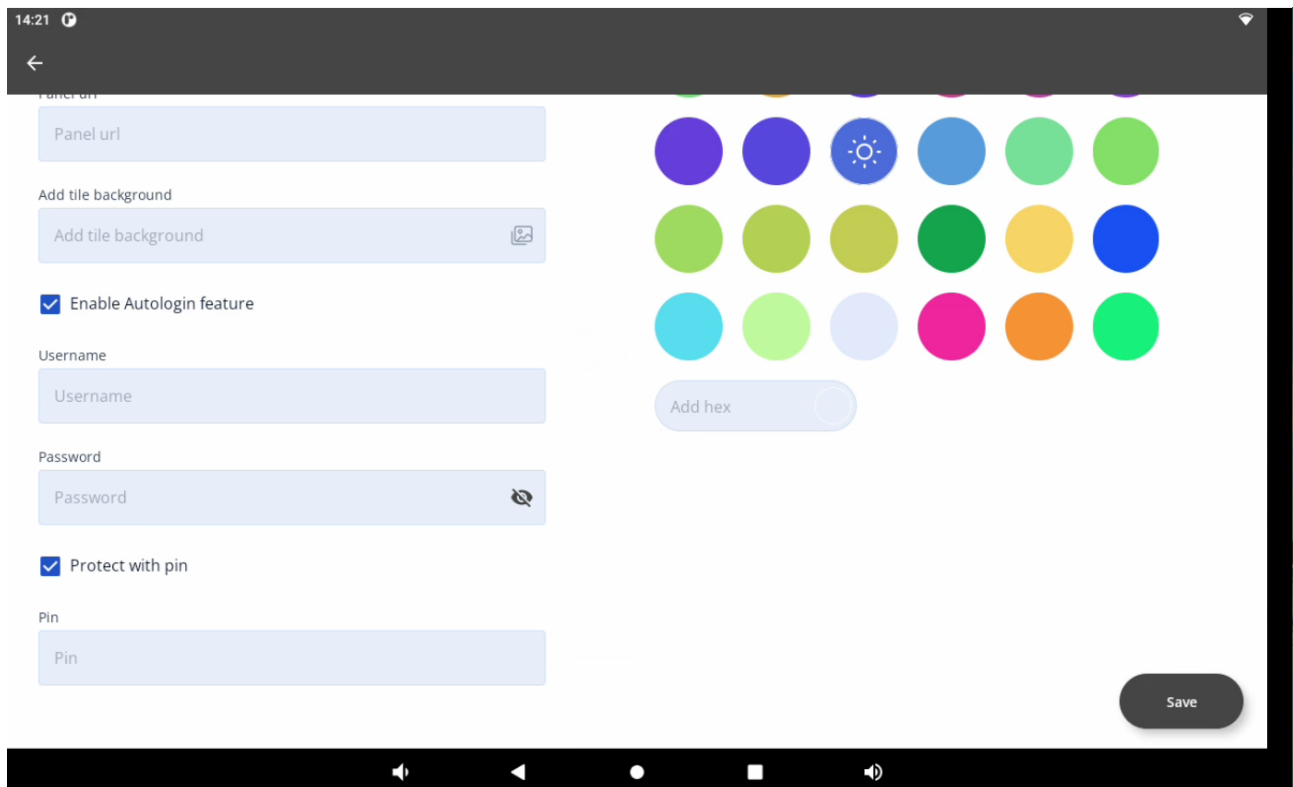


Figure 30. Protect with pin option

After successful logging in, the application goes back to the main screen with a list of added views.

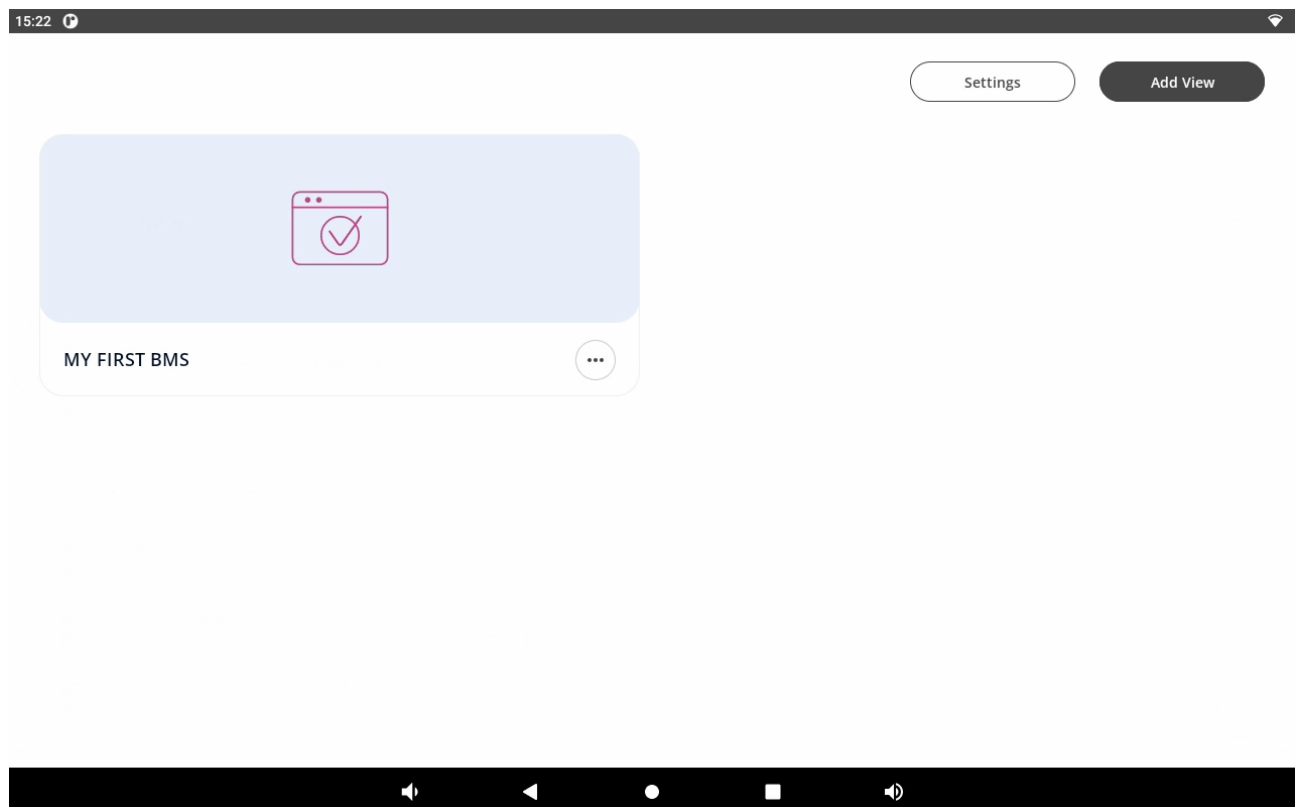


Figure 31. Main screen with an added view

## 5.2 View Menu

The three-dots button in the bottom right corner of the tile extends the tile menu:

- **Edit:** edits the tile connection credentials;
- **Delete:** deletes the tile;
- **Home station:** can be chosen only for one tile only; the chosen view will be automatically logged in after restarting or turning on the panel (Disable home station option appears for the selected home station). Additionally, if the app is left inactive in the home screen for more than 5 minutes, the home station will log in automatically after 5 minutes.

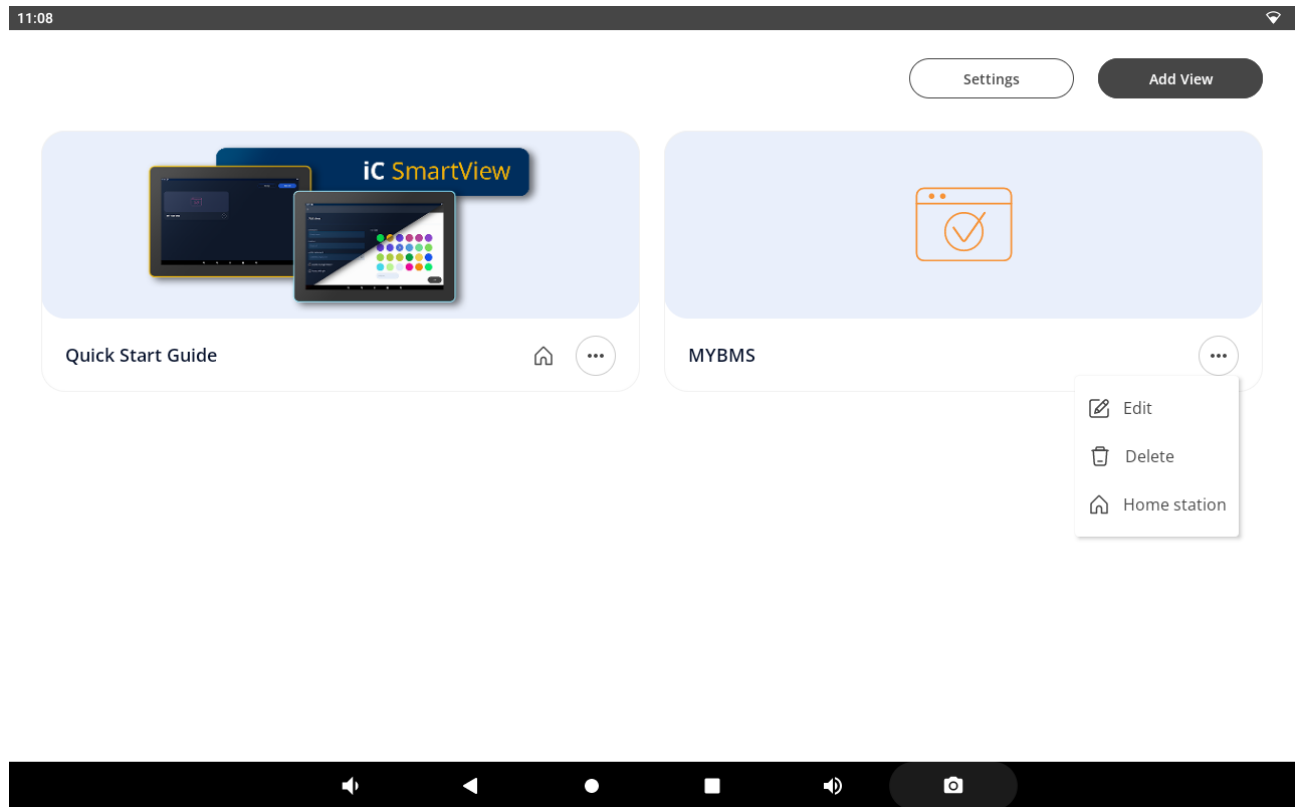


Figure 32. List of views, with options

## 6 Remote Management

The iSMA CONTROLLI HMI Android panels (PA-LED and iSMA-D-PA series) with installed iC SmartView application can be remotely configured using a few convenient methods, which fit specific user requirements. The available ways of panels' remote management are:

- [Web Service](#)
- [iC SmartView Config Service for Niagara](#)
- [Rest API](#)

More detailed descriptions are available in the following sections.

### Warning!

For full access to remote configuration, please make sure that the Enable API v2 and Enable Web Service options are switched on in the [Remote Management](#) section in the panel's settings.

### 6.1 Web Service

Available from iC SmartView V5.2.0.

The iC SmartView web server offers a simplified user experience providing access to the following options:

- logging in;
- views manager;
- display management;
- alarms settings;
- kiosk mode settings;
- LED manager.

For proper operation, the web server requires:

- API v2 enabled;
- user and password configured;
- Enable Web Service option checked in the Remote Management section in Settings.

The web server can be accessed at the <https://DEVICE.IP:5580/config> address.

## 6.1.1 Logging in

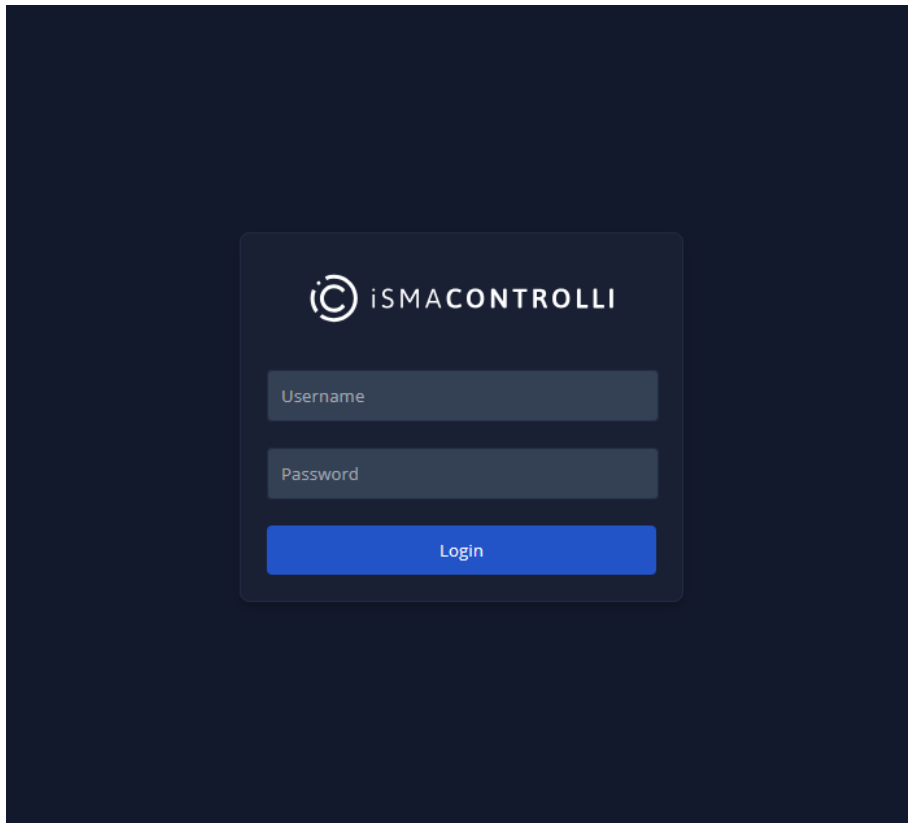


Figure 33. Login page

The login credentials must be configured before start in the Remote Management section in Settings.

## 6.1.2 Views Manager

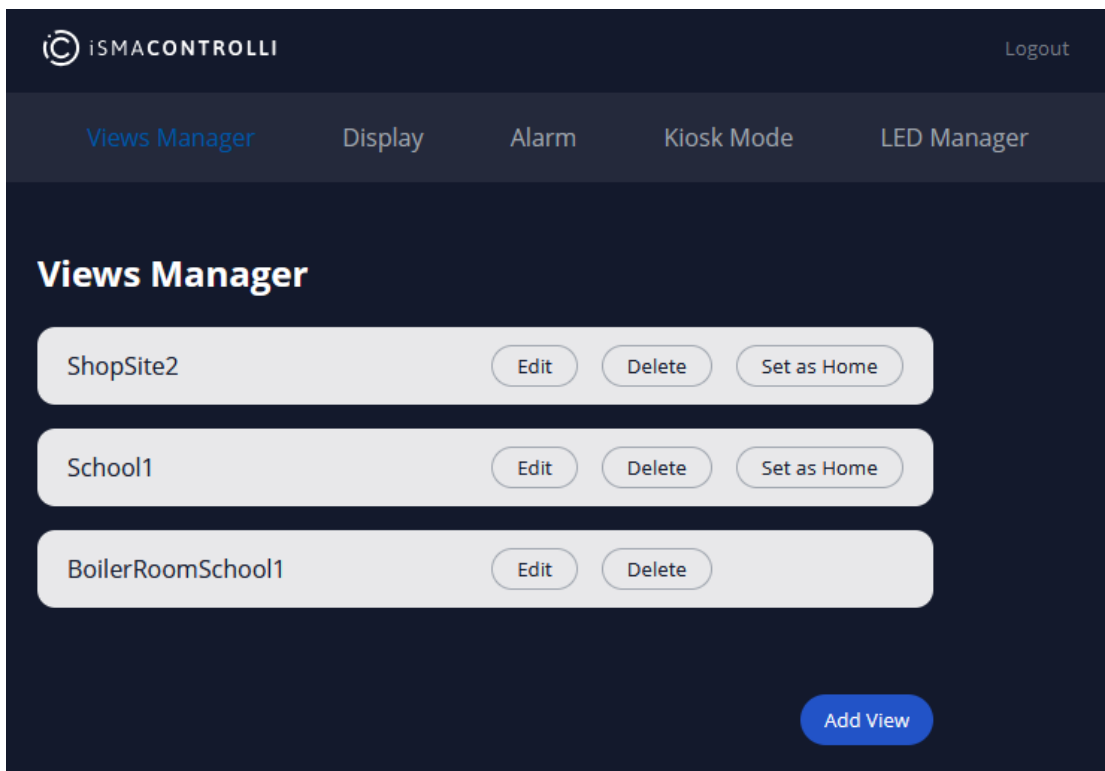


Figure 34. Views Manager

The Views Manager in the web server lists all available views and allows to edit them, delete, and set the view as home.

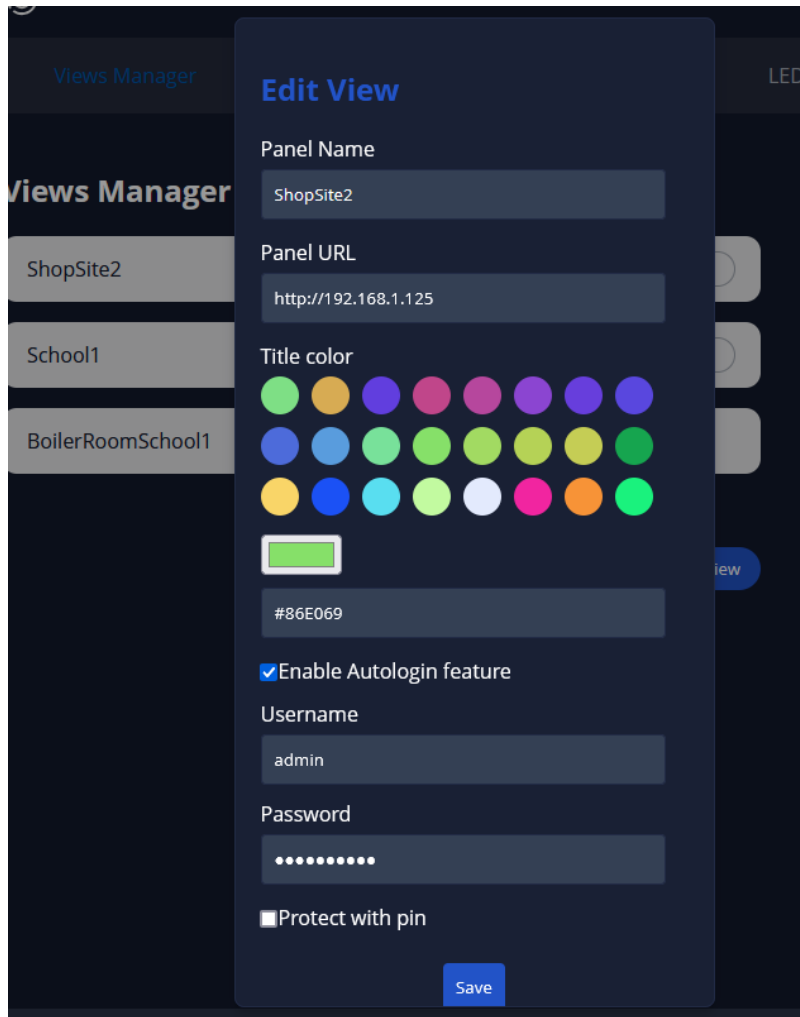


Figure 35. Views editing options

Among the editing options available in the web server, it is possible to:

- change the view's name;
- change the view's URL;
- choose the title color;
- enable or disable the autologin;
- set the view's username and password;
- enable or disable the [Pin lock](#).

To find out more, go to the [Web Views Management](#) section.

### 6.1.3 Display

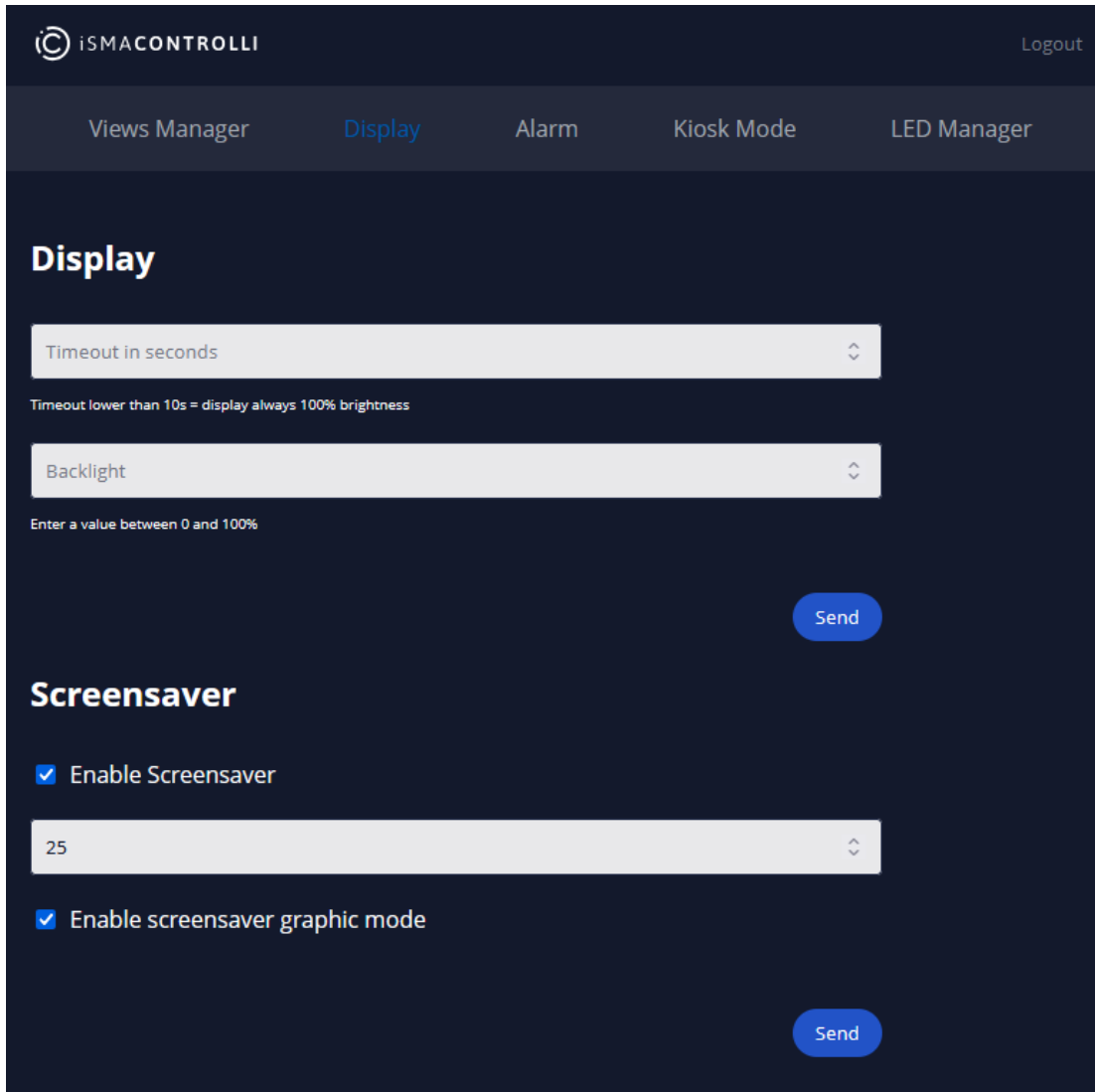


Figure 36. Display settings

In the Display section, it is possible to set the timeout and backlight values. It is also possible to enable or disable screensaver and set its delay time. The last check mark allows to enable or disable the screensaver graphic mode.

To find out more, go to the [UI](#) section.

## 6.1.4 Alarm

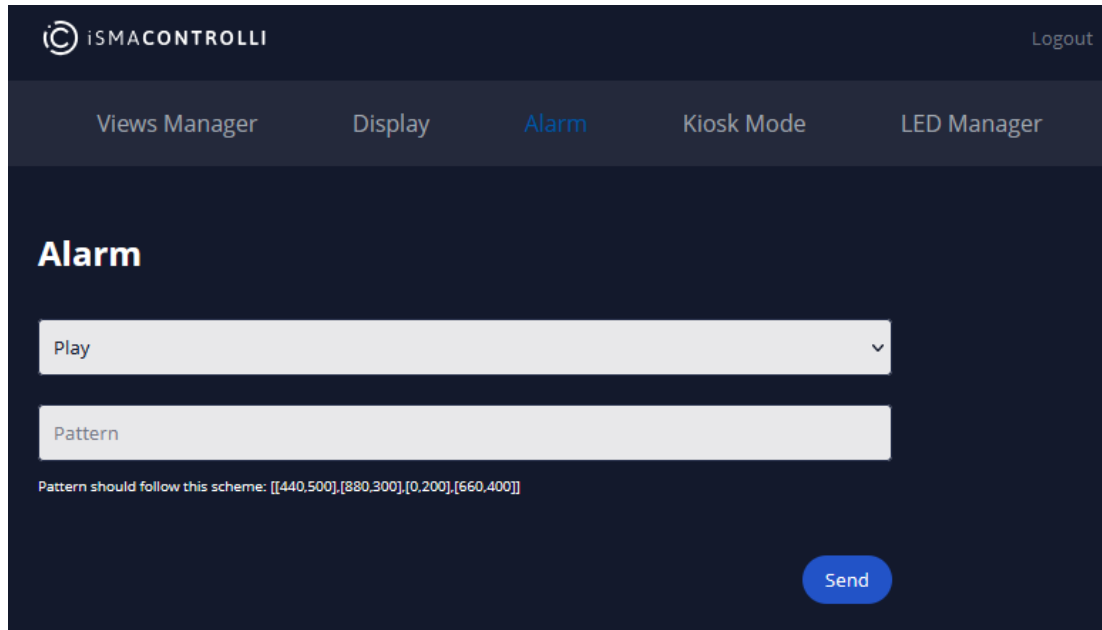


Figure 37. Alarm section

In the Alarm section, it is possible to control alarm sounds on the panel. Alarms sounds are defined as patterns, which are JSON arrays of tone objects with frequency in Hz and time in milliseconds, for example:

- two tone pattern `[[2000, 500], [4000, 500], [2000, 500], [4000, 500]]` is a 2 kHz tone for 500 ms and 4 kHz tone for 500 ms in a continuous loop;
- constant high pitch pattern `[[4500, 0]]` is a 4.5 kHz tone continuous, 0 ms means there is no break.

### More examples of alarm patterns:

- silent: `[[0, 0]]`
- two tone: `[[2000, 500], [4000, 500], [2000, 500], [4000, 500]]`
- constant high pitch: `[[4500, 0]]`
- constant low pitch: `[[1500, 0]]`
- intermittent high pitch: `[[4500, 500], [0, 500], [4500, 500], [0, 500]]`
- intermittent low pitch: `[[1500, 500], [0, 500], [1500, 500], [0, 500]]`

In the first field, the user selects a specific action:

- **play**: plays a sound, which pattern is defined in a second field;
- **save pattern**: saves a defined pattern to the panel; pattern's name, frequency, and time are defined in two next fields;

**Note:** Saved pattern becomes a new default alarm sound.

- **remove pattern**: removes a pattern previously saved on the panel; pattern to remove is selected by name defined in a second field;
- **play pattern**: plays a pattern previously saved on the panel; pattern to play is selected by name defined in a second field;
- **stop**: stops playing sounds; if invoked by a play or play pattern action, the sound will play until it is stopped by this action.



### 6.1.5 Kiosk Mode

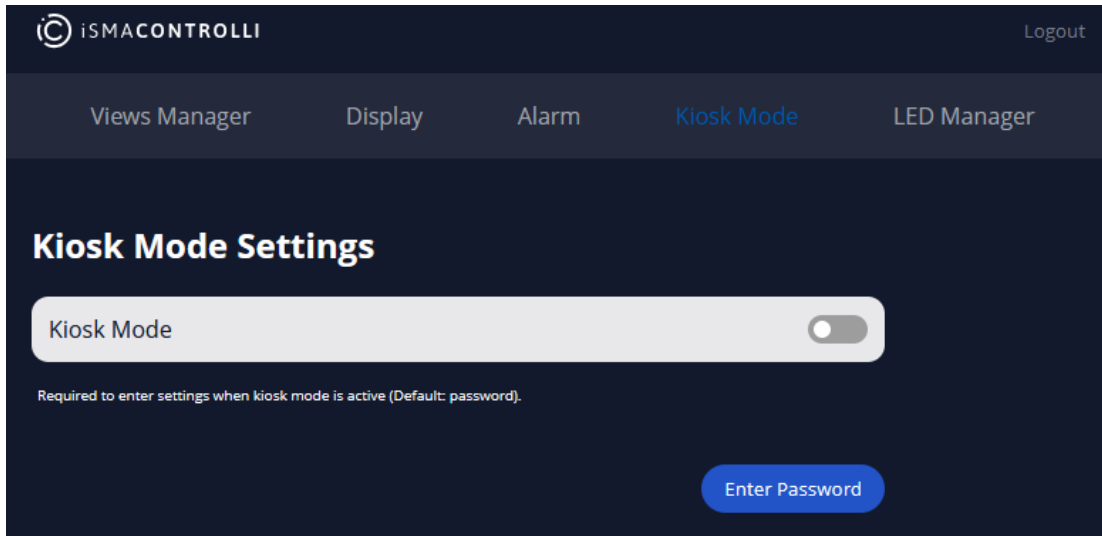


Figure 38. Kiosk mode section

In the Kiosk Mode section, it is possible to enable or disable the kiosk mode on the panel.

To find out more, go to the [Kiosk Mode](#) section.

### 6.1.6 LED Manger

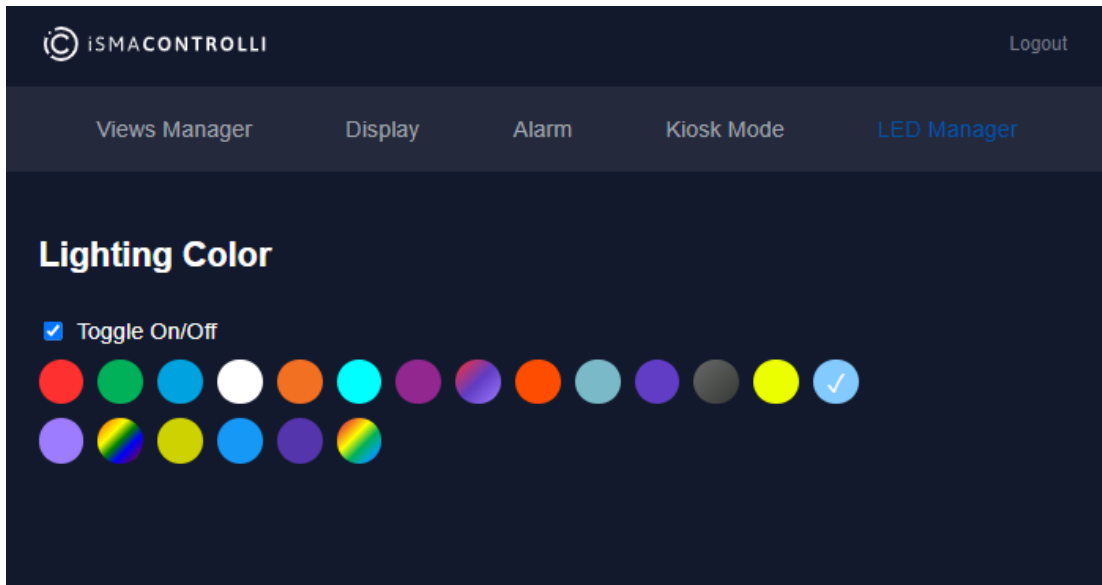


Figure 39. LED manager

Please note that this section is available only for panels with a LED lighting frame.

In the LED Manager section, it is possible to switch on and off toggling of LED colors or set one color for the panel's LED frame.

## 6.2 iC SmartView Config Service for Niagara

The iC SmartView Config service for Niagara Framework is dedicated for iSMA CONTROL LI HMI Android panels equipped with the iC SmartView application. The iC SmartView Config service is a Niagara palette of components and extensions that allow for a secure remote

configuration of certain elements on the panels. The palette also includes templates, which are specifically predesigned for the 2 series of Android panels: PA-LED and iSMA-D-PA.

The iC SmartView Config service allows to configure the following elements:

- kiosk mode (switching on and off, setting a new password),
- screen brightness (setting a new level of brightness),
- screensaver (switching the screensaver on and off, enabling or disabling screensaver graphics),

and applicable only for the PA-LED panels series:

- LED lighting (switching the LED lighting on and off, setting a new color of the lighting).

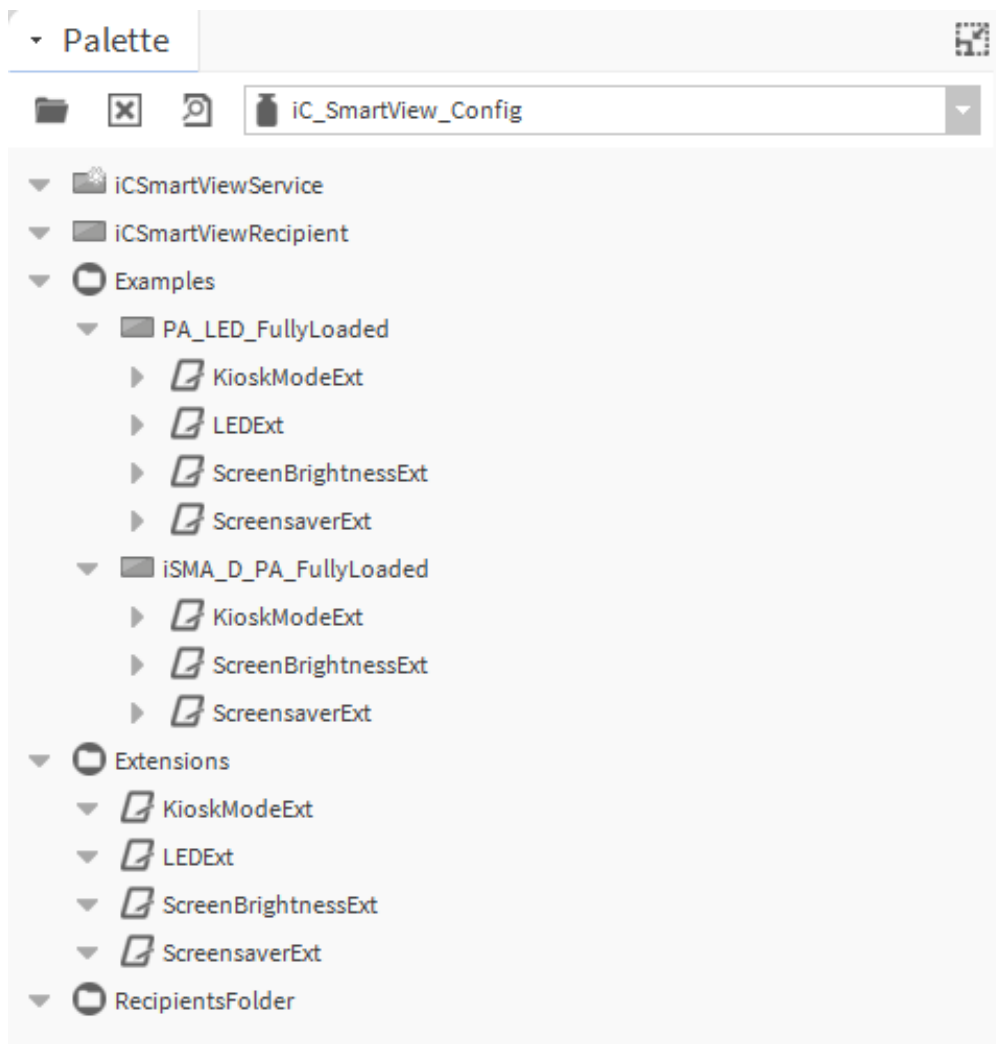


Figure 40. The contents of the iC SmartView Config palette

#### Note

For more information, please see the [iC SmartView Config user manual](#).

## 6.3 Rest API

The iC SmartView is equipped with the Rest API interface, which provides a remote access to some of application's functions like a screensaver mode, LED bar color configuration,

modifying saved connections, or managing screen brightness and inactivity timeout. Rest API, when enabled, is available on the port 5580.

A complete functional documentation of the iC SmartView's Rest API is available in the iC-SmartView\_Rest-API.html document. It provides commands in the following programming languages:

- Curl;
- Java;
- Java for Android;
- Obj-C;
- JavaScript;
- C#;
- PHP;
- Perl;
- Python.

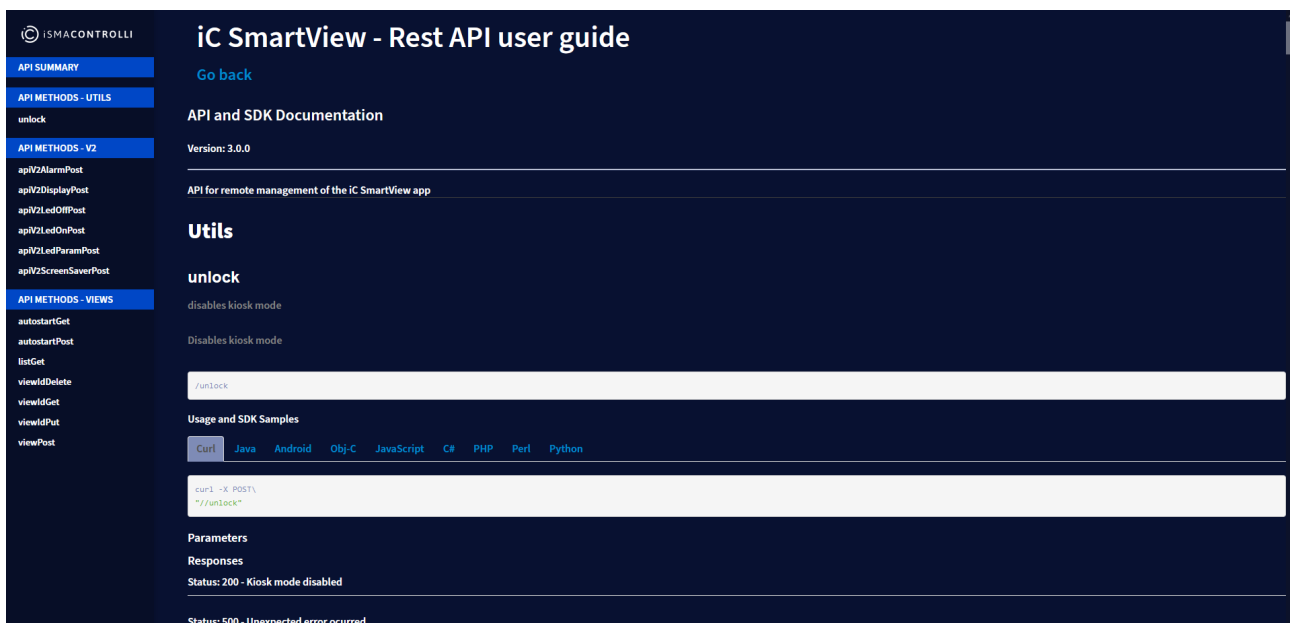


Figure 41. Technical documentation for the iC SmartView Rest API

The Rest API V2.0.0 has the following functionalities:

- managing the Kiosk mode;
- managing an autostart connection view;
- adding, editing, and removing connection views;
- enables an HTTP basic authentication;
- managing screen brightness and timeout;
- playing tunes on a device's speaker;
- protection with a configurable username and password;
- LED management.

**Note:** Rest API does not require an additional authentication. Make sure to use the Rest API only on a secured network.

## 7 Language

The iC SmartView application will be displayed in the system language, as long as that language is in the list of application languages. If the user sets the Android system language to one that is not available in the list, the app will be displayed in English. To change the system language, follow the steps below:

### 7.1 Changing Language

The list of included languages:

- PL;
- DE;
- CZ;
- IT;
- HU;
- LV.

**Step 1:** Go to the main menu of the Android panel PC—a round, white icon with dots at the bottom center of the screen:

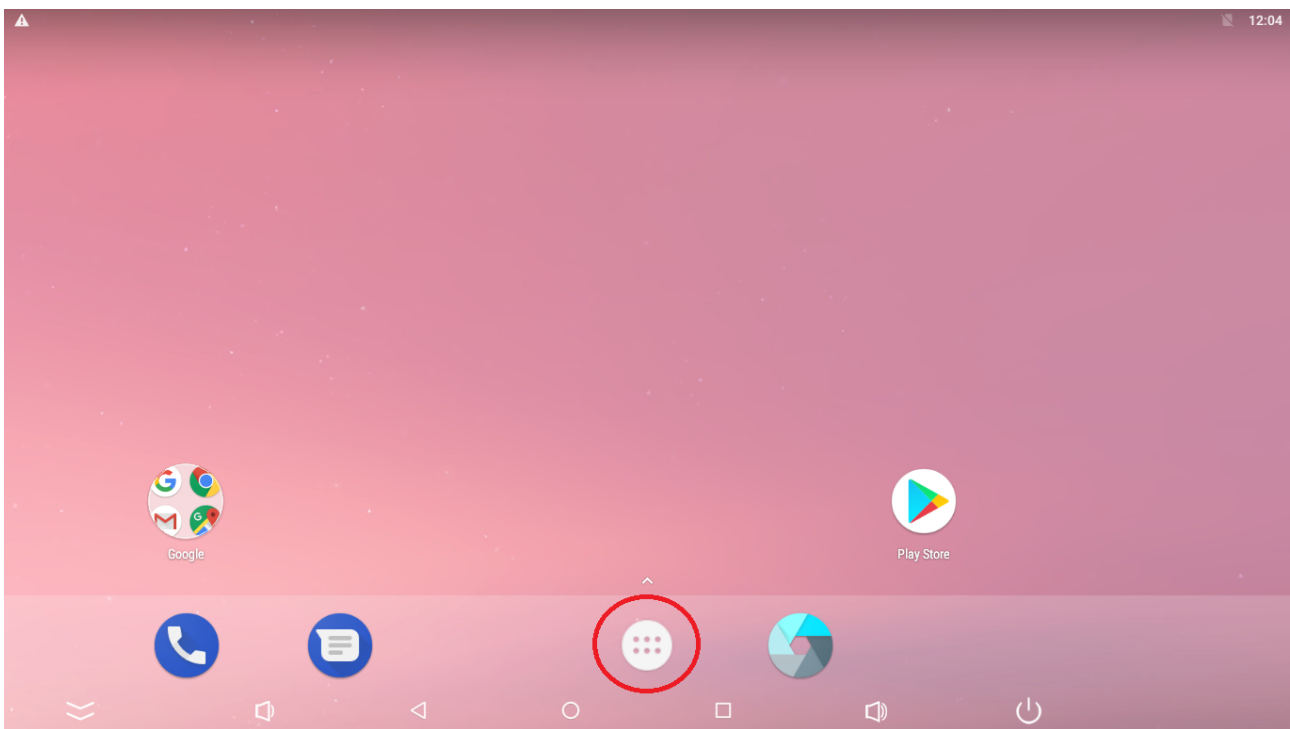


Figure 42. Main screen

**Step 2:** Go to the Settings:

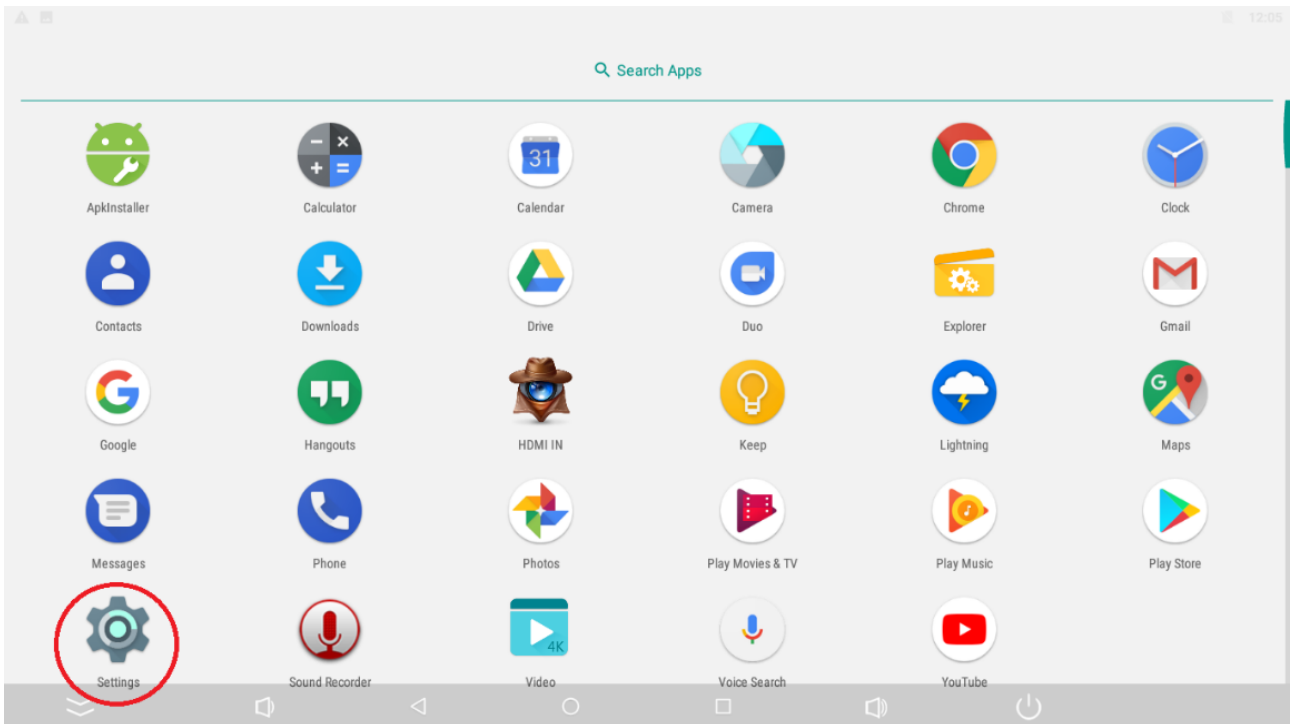


Figure 43. Settings

Step 3: Go to the Language & input:

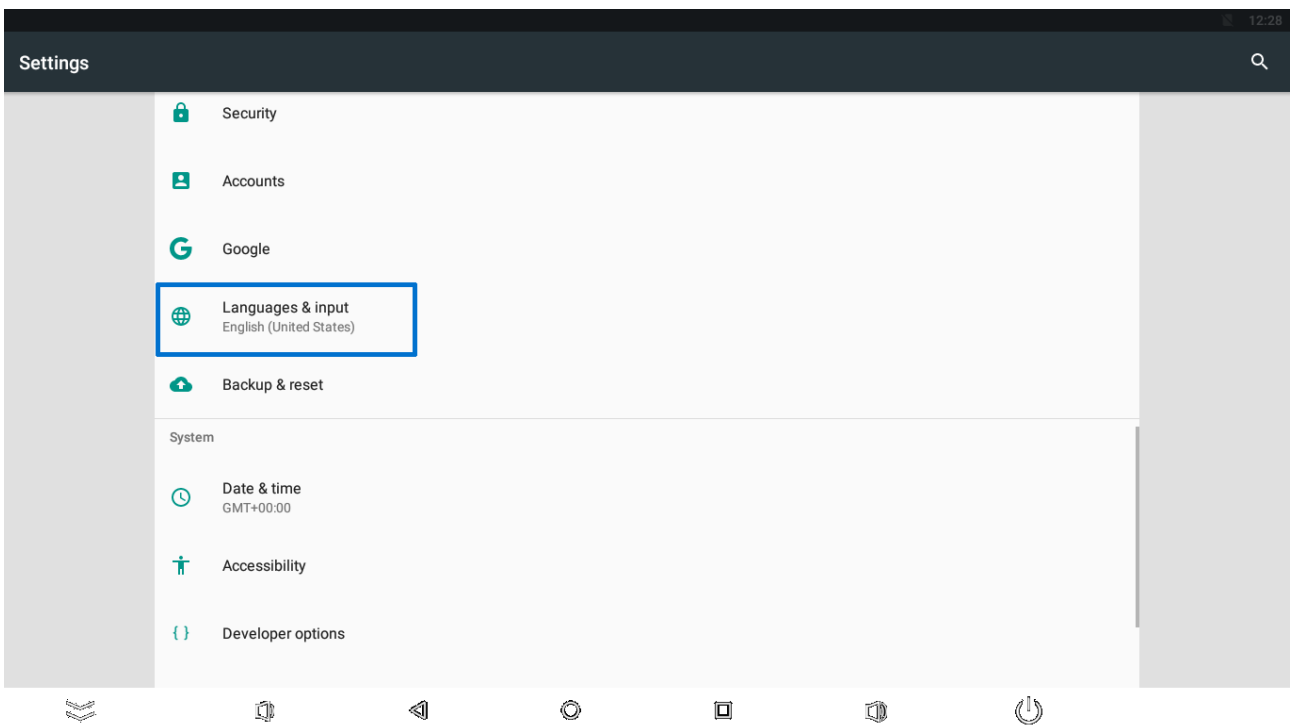


Figure 44. Language settings

Step 4: Go to the Language, which expands the list of languages available to choose from. Tap the chosen language:

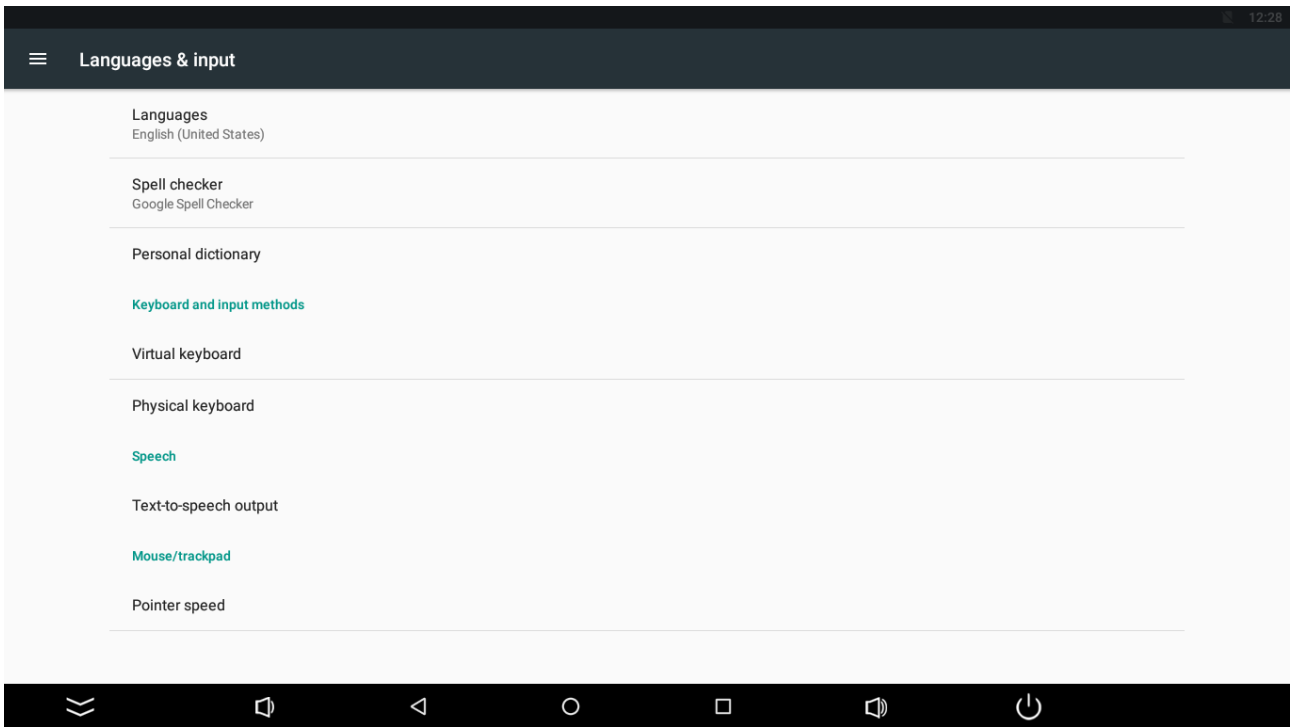


Figure 45. Language