INTEGR8

Integr8 4.3" Facial Recognition Reader

Installation Manual

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Integr8 System

Introduction

Integr8 is a flexible web-based system that allows you to program, monitor and control a site from any smartphone, tablet or computer with a fixed or mobile network connection. It combines access control, video surveillance, visitor management, alarm intrusion, and automation and control, all into one unified package.

Document Information

This document outlines the operation of the various networking and communication protocols used by Integr8.

It is recommended that at a minimum the ports specified in this document are opened to the device to allow upgrade and effective management of the access control system.

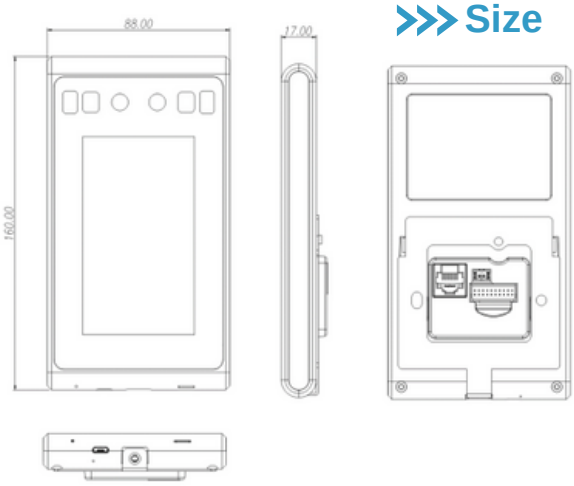
Software Application Version

This document is independent of the software application version that is operating and is based on the default configuration of Integr8.

>>> Main Features

- Face recognition accuracy ≥99.9%
- Recognition speed<0.2S
- 20,000 face database
- 60,000 recognition records
- Face anti-counterfeiting
- Adapts to complex lighting environments

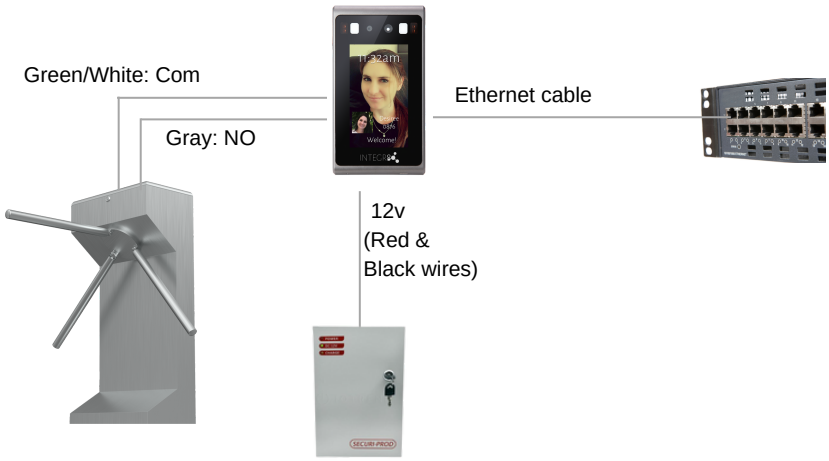
>>> Size



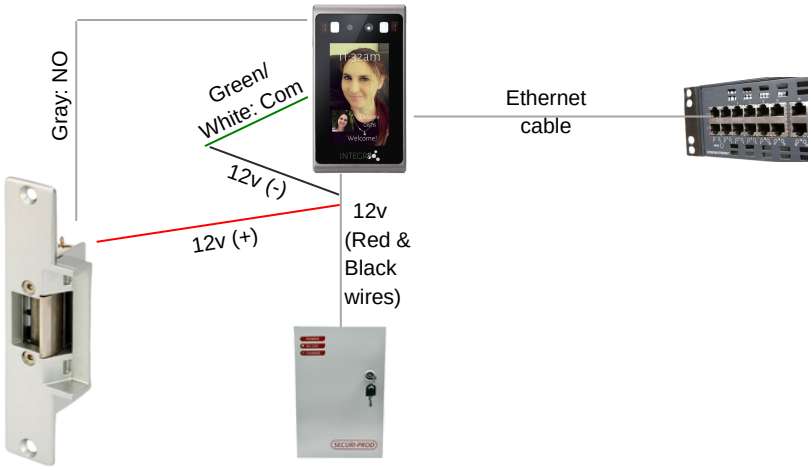
Processor	Dual-Core ARM Cortex-A7 @1.0GHz
Operating System	Linux operating system
Camera	Binocular, 2.1 million effective pixels, 1920*1080
Operating temperature	-20°C - +55°C
Lens	4.5mm
Wifi module	Yes
Bluetooth module	Yes
Touch Screen	Yes, Multi-touch screen
Speaker	Yes with Voice Prompt

Wiring Diagrams

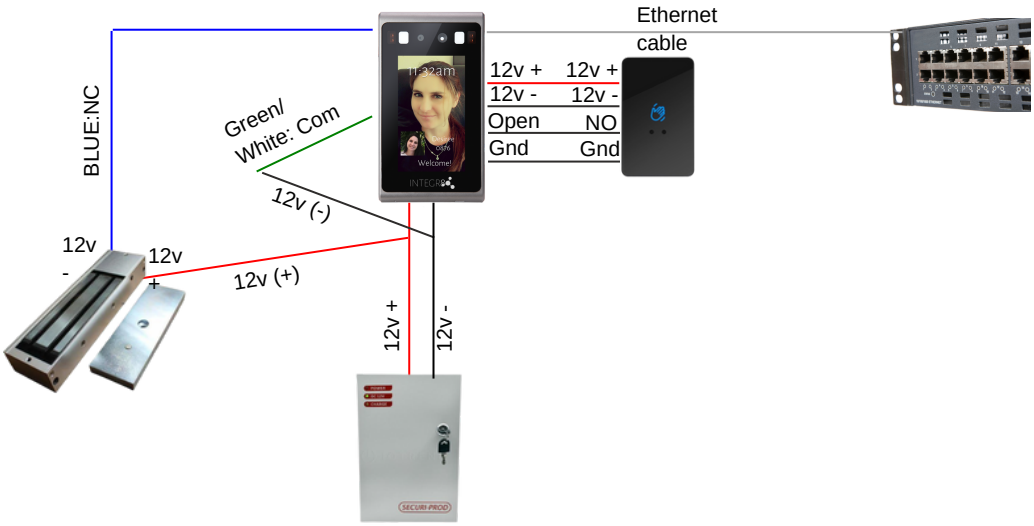
Turnstile



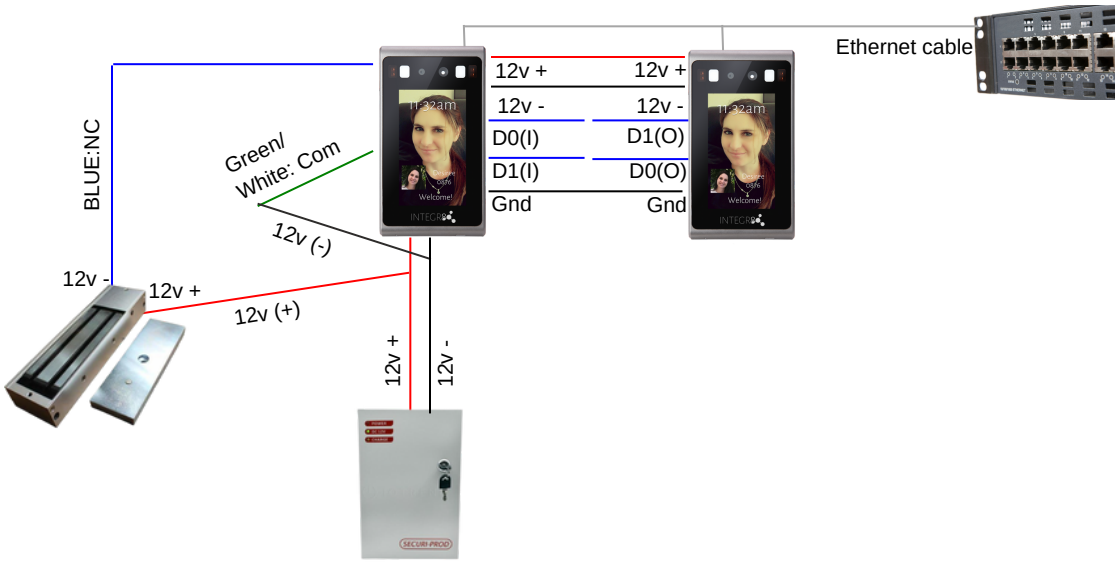
Strike Lock



Magnetic Lock and No Touch Sensor



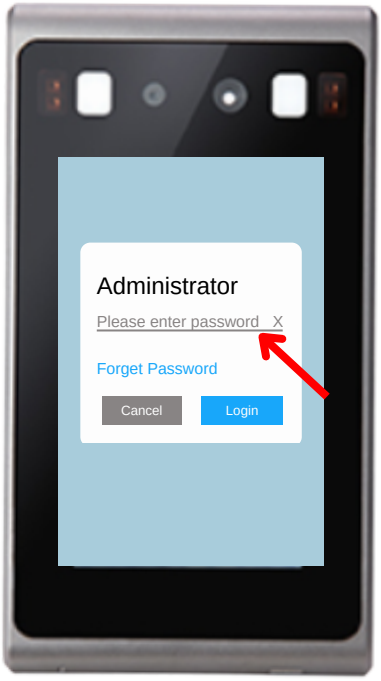
Magnetic Lock and 2 Readers



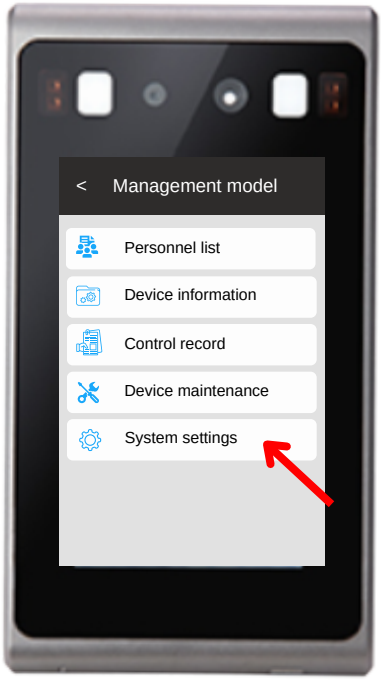
Software Setup

Once your Integr8 Reader is installed, you can pull it into the software following these steps:

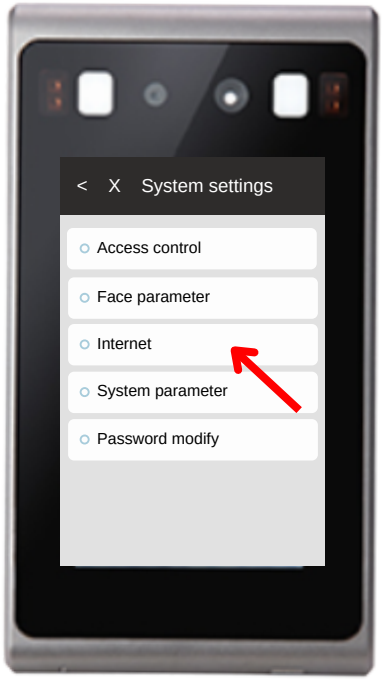
STEP 1: Add the reader on to the Network



Log into the reader by holding your finger on the screen. The default password is admin.



Select System Settings

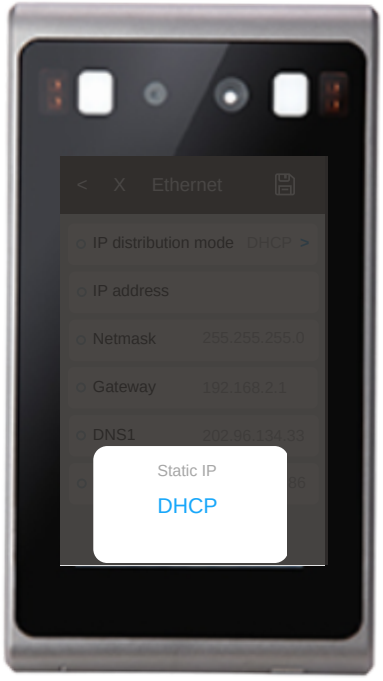


Select Internet

If connecting via ethernet, select Ethernet

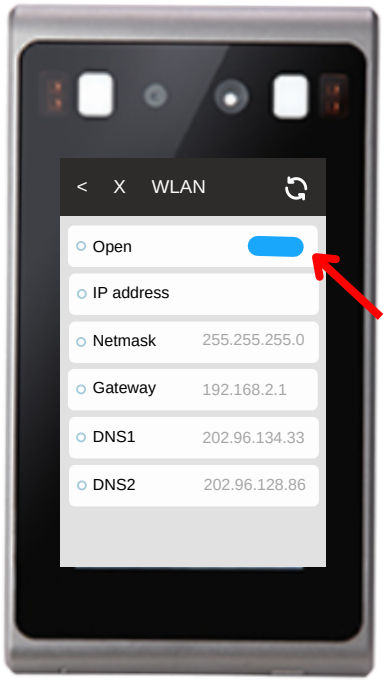
Skip to next pg for WiFi

If using DHCP then save and exit, if not then click on the blue arrow

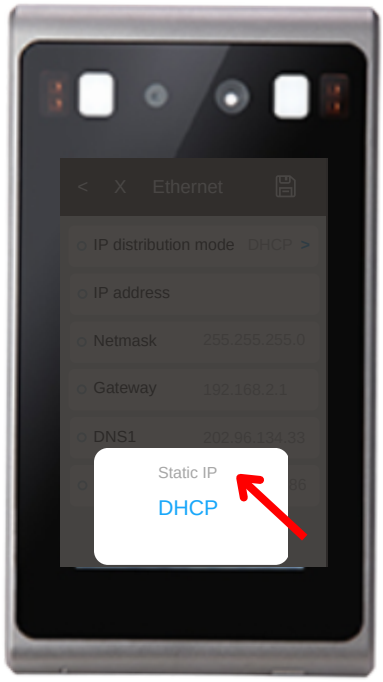


If using Static IP then select from the list and obtain details from Network Administrator

If connecting via WiFi then select WLAN



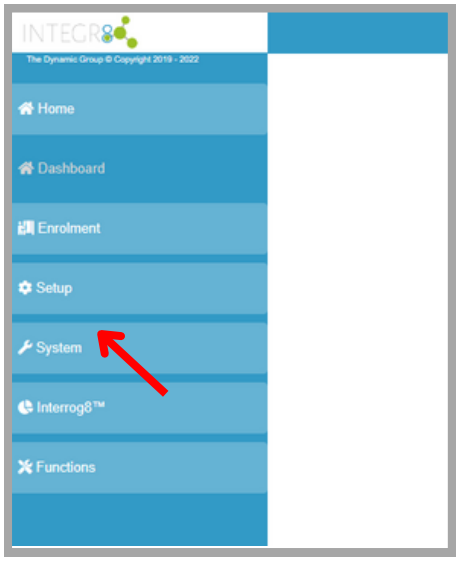
If using DHCP then save and exit, if not then click on the blue arrow



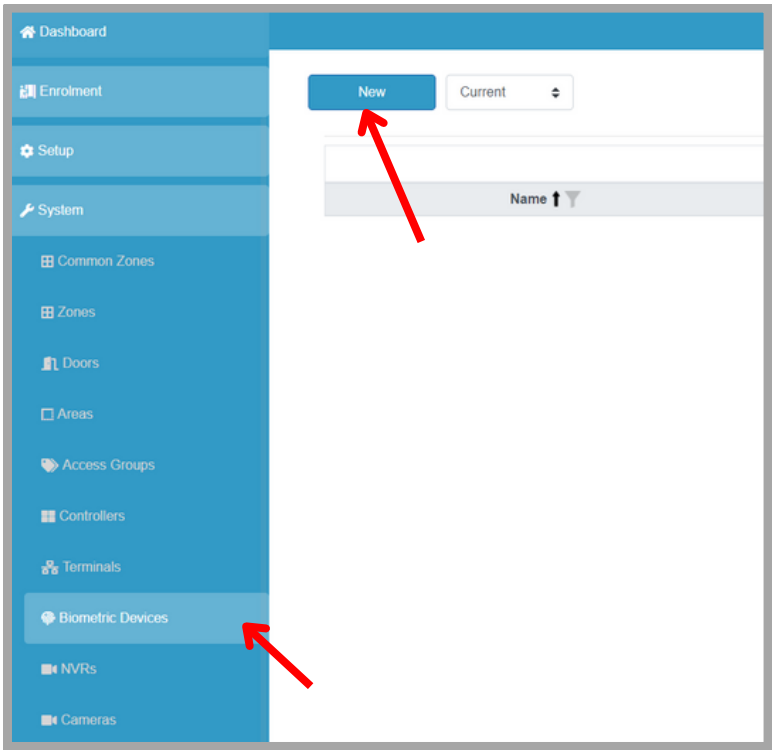
If using Static IP then select from the list and obtain details from Network Administrator

Step 2: Pull the reader into Integr8

Log in to Integr8 using your Administrator credentials.



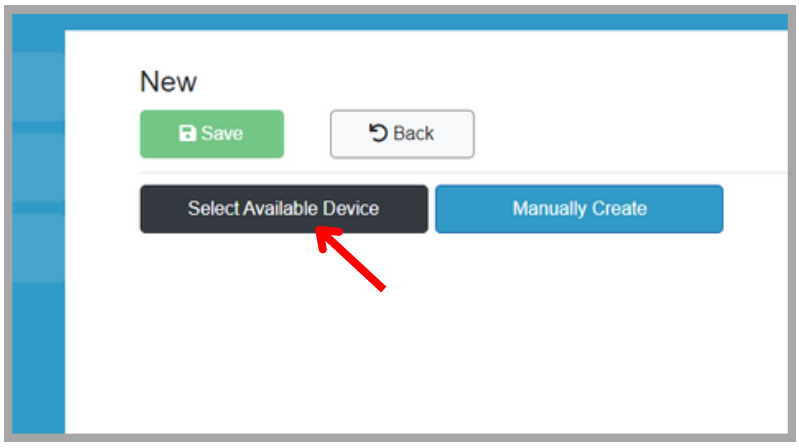
Click on System in the menu on the left of the screen.



1. Click on
Biometric Devices

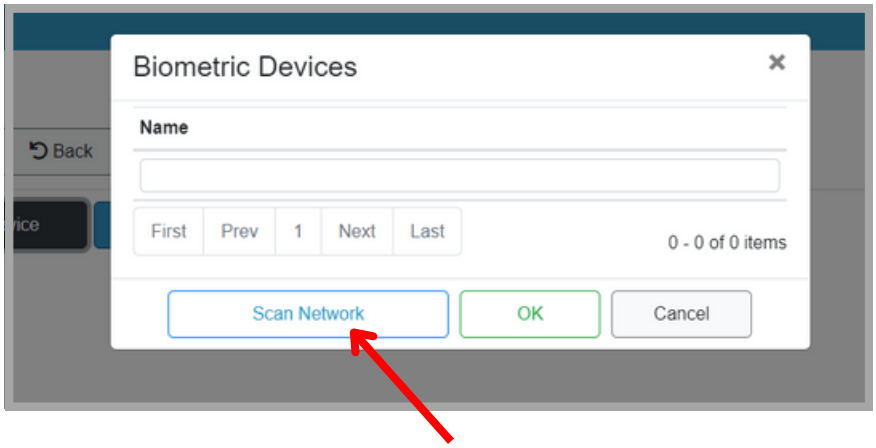
2. To add a reader to the software, click on **New**

Option 1: Scan the network for the reader

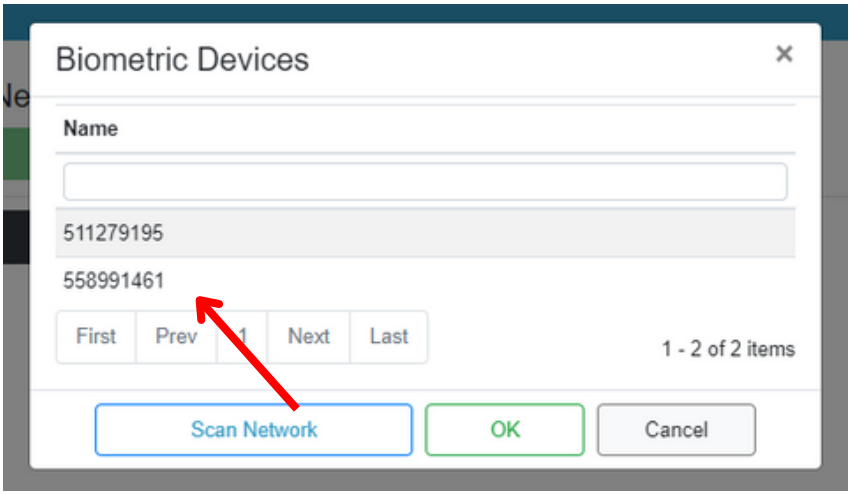


You can now either scan the network for readers (which will automatically gather all the required information like IP address etc.), or you can add it manually.

To scan the network, Click on
Select Available Device

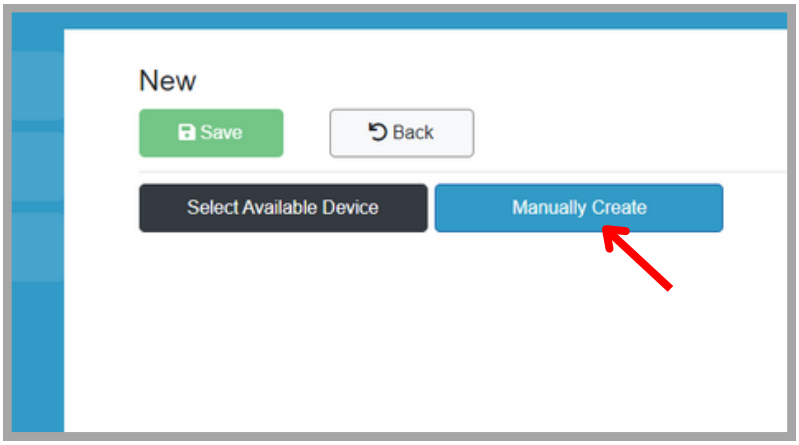


Click on
Scan Network



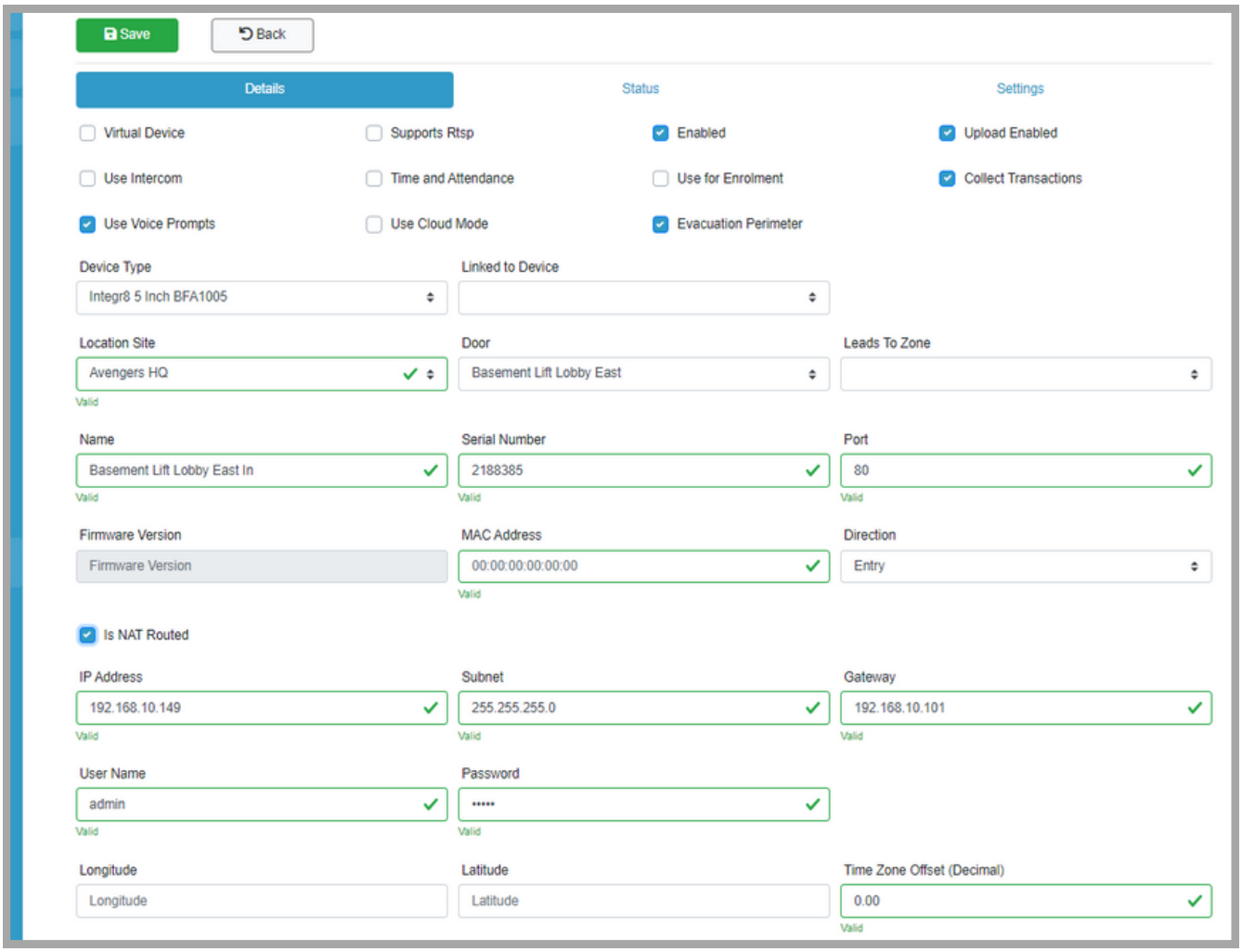
The serial numbers of all available devices will be shown here. Select the correct one you want to install. (Remember the serial number is shown on the screen of reader in the bottom right corner.

Option 2: Add the reader manually



To add a reader manually, click on **Manually Create**

The following screen will look the same for both option 1 and 2. The only difference is that in option 1 would have been populated already, and in option 2 you have to enter the information manually.



This screen is very important, so let's look at each field and what they mean:

Virtual Device: This is for connecting to 3rd party software and hardware, therefore is not relevant for this reader and should not be ticked.

Supports Rtsp: If this box is ticked, it will connect the device's video stream, and enables you to view the video in the Oper8 dashboard or any Rtsp compliant viewer. This box is optional.

Enabled: This button allows you to enable or disable a reader. To use this reader this box must always be ticked.

Upload Enabled: This button allows you to enable or disable data to be uploaded. If you are ready to use this reader and you want the data to be sent to it, then this box must be ticked.

Use Intercom: Some Integr8 readers has a built-in Intercom function. The 4.3" reader does not, so this box must not be ticked.

Time and Attendance: This option will enable the Time and Attendance report to be used. This is optional.

Use for enrolment: If this device will be used for enrolment, then this box should be ticked.

Collect Transactions: To enable collection of transactions from the device. If disabled, transactions will not be collected.

Use Voice Prompts: As transactions happen, the voice prompt will tell you what action it's taking (e.g. "Access granted". Some people may not want to hear these voice prompts all day, so this can be disabled by unticking this box.

Evacuation Perimeter: If this reader is installed on the perimeter (i.e. at any entrance or exit of the building) then this box can be ticked. This is very helpful for evacuations as you will be able to pull the report of who did not exit the building.

Device Type: In the drop-down all the different types of readers will be shown that can be used with Integr8. For this reader you should select "**Integr8 V8-5-BFA1005**".

Location Site: If you run a centralised server for many sites, then you will be able to select the relevant site from this list. If it's a single site, then this should be **"System Site Default"**

Door: Here you will select the door this reader is to be used on.

Leads to Zone: If you are using zones, then you will be able to select the relevant zone here.

Name: You are able to name this device to make it easier to identify (e.g. Reception entrance)

Serial Number: If you scanned the network, then this field will be populated already. If you are manually adding the reader then you will enter the serial number here. Remember it appears on the reader home screen in the bottom right corner.

Port: For the 4.3" reader the Port should be 80

Direction: Select whether this reader is used for entrance or exit. If it's just a stand alone reader that is used for Time and Attendance (as an e.g.) then clock on No Direction.

Is NAT Routed: If the device has NAT routing this MUST be ticked, if not, the IP address on the device will change when uploaded.

IP Address: If you scanned the network, then this field will be populated already. If you are manually adding the reader then you will enter the IP Address here. Remember it appears on the reader home screen in the bottom left corner.

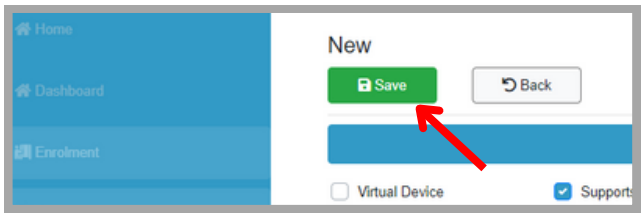
Subnet: Enter according to network setting of the site.

Gateway: Enter according to network setting of the site.

User Name and Password: This is the reader username and password. you can change the username and password here and it will automatically pull through to the reader.

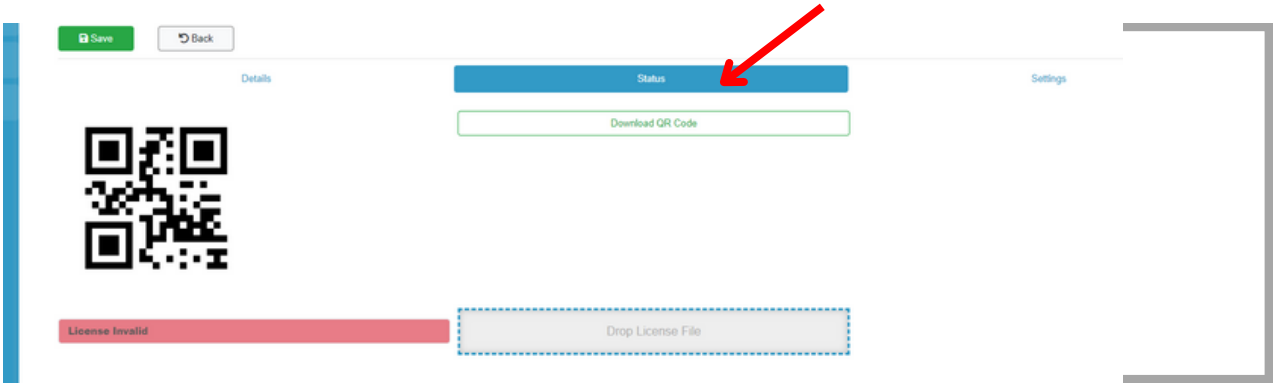
Longitude and Latitude: If you would like to plot the reader using GPS location, then you can enter these. This is optional.

Time Zone Offset: If the reader is used in a different time zone, then this can be changed here.



After filling all the fields, click on **Save** at the top of the screen.

Status (licence)



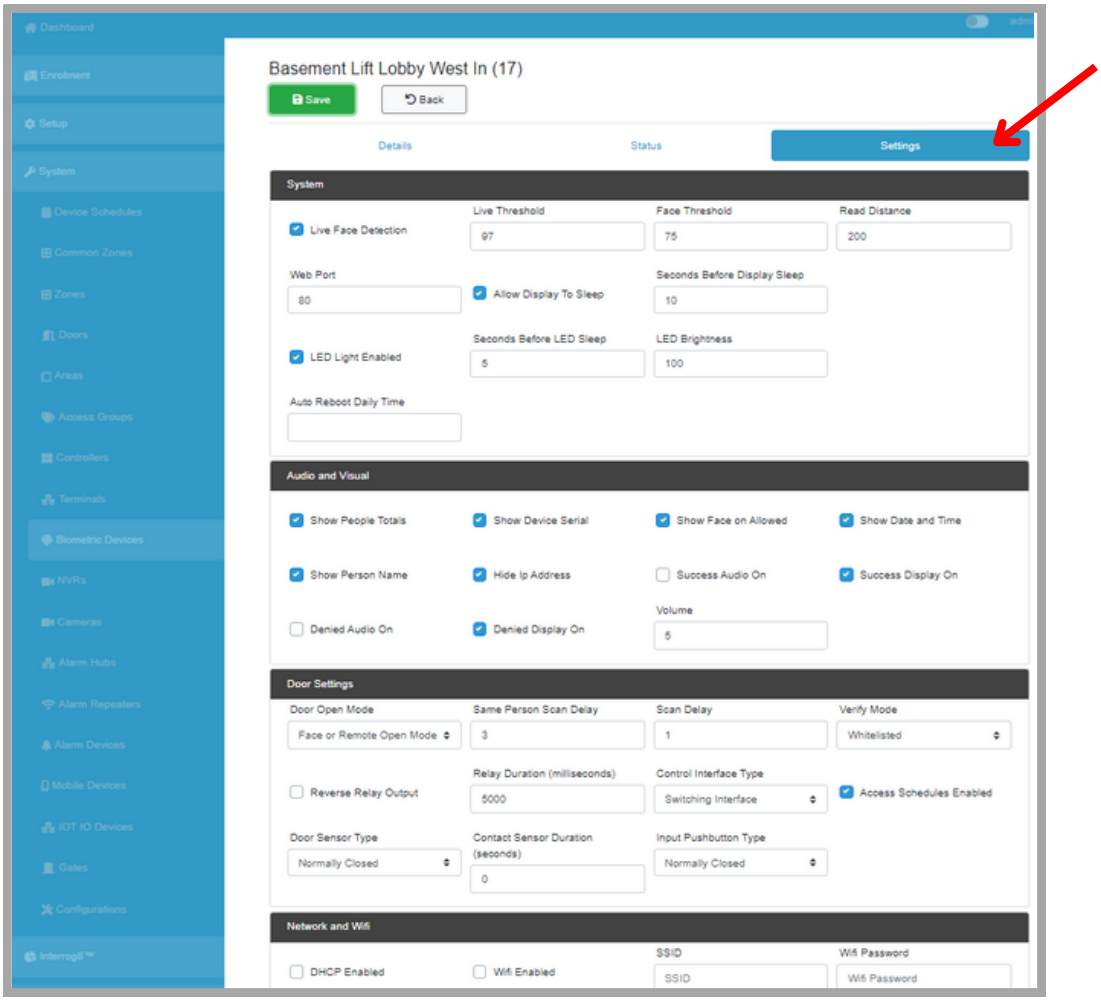
After successfully saving the device, you will now move to the **Status** tab at the top of the screen. This is where you licence the reader.

In order to get the licence issued by Integr8, you will need to send them your reader's serial number. They will then send you the licence file via email that is linked to this device.

Simply drag and drop the licence file into the grey area "**Drop Licence File**" or click on Drop Fiel to open the Browse file function.

After the licence file is added the screen above will appear. If the licence is valid then the box will turn green.

Settings



You are now able to adjust the **Settings** of the reader, however all of these setting will already be pre-set to the most optimal mode of operation, so only change the settings if you want to change something in particular:

SYSTEM

Live Face Detection: If this box is ticked then the reader will determine whether the face is "alive" or whether a photo is being used. Recommended is 97.

Face Threshold: The threshold determines the accuracy of detection. Recommended threshold is 80.

Allow Display to Sleep: If this box is ticked the reader will go into standby mode when not in use.

Seconds Before Display Sleeps: How long to wait on inactivity before putting the display to sleep.

LED Light Enabled: The reader has 2 built in LED lights to make it easier to read faces. This tick box can be unticked if you want to switch off the lights and not make use of them.

Seconds Before LED Sleep: The LED lights will switch off if there is no movement for the amount of seconds you set it for.

LED Brightness: You can adjust the brightness of the LED's.

Read Distance: At what distance would you like the reader to "read" faces. This is measured in cm, and can be up to a distance of 200cm.

Web Port: This will always be 80 for the 4.3" reader

Auto Reboot Daily Time: You are able to set a time that you would want the reader to reboot daily. This is not mandatory.

AUDIO AND VISUAL

Show People Totals: On the reader in the top left corner you can see how many people are enrolled on that particular reader. You may not want this to be visible, so then this box shouldn't be ticked.

Show Device Serial: On the reader in the bottom right corner you can see the serial number of that particular reader. You may not want this to be visible, so then this box shouldn't be ticked.

Show Face Allowed: This will show the registered face when access is granted.

Show Date and Time: If you want the date and time to be displayed on the reader, then this box should be ticked.

Show Person Name: This will show the name of the person for which access is granted. As a side note, if the threshold is set to a high number, then the reader might identify people incorrectly, and the incorrect name will show. If this happens, set the threshold to a lower number.

Hide IP Address: On the reader in the bottom left corner you can see the IP Address of that particular reader. You may not want this to be visible, so then this box shouldn't be ticked.

Success Audio On: If this box is ticked then the reader will say "Access Granted" if a face is identified.

Success Display On: If this box is ticked then the reader will display "Access Granted" if a face is identified.

Denied Audio On: If this box is ticked then the reader will say "Stranger" if a face is not identified.

Denied Display On: If this box is ticked then the reader will display "Stranger" if a face is not identified.

Volume: How loud the voice on the reader is.

DOOR SETTINGS

Door Open Mode: Select what mode you would like to use to open this door.

Same Person Scan Delay: In order to avoid multiple transactions being recorded when a person's face is read, you can set the number of seconds a reader should wait before recording a transaction for the same person again.

Scan Delay: The amount of seconds a reader should wait before attempting to identify a different face.

Verify Mode: How would you like to verify users?

Reverse Relay Output: If you would like to change the relay output from normally open to normally closed without having to rewire the physical reader

Relay Duration: How long do you want the relay to stay active?

Control Interface Type: Are you using Wiegand, Switching or RS485

Contact Sensor Type: To detect whether a door stays open for too long, or if it should normally be open, you would select the default here.

Contact Sensor Duration: After how many seconds should the user be notified that the default (normally closed / open) is violated.

Input Pushbutton Type: This refers to a No-Touch or Push-Button used with this reader if applicable. It's worth noting that if the reader relay continually makes a clicking noise (activating) then the pushbutton type will need to be changed.

Network and WiFi

DHCP Enabled: Sets the device to be DHCP (Gets IP Address automatically from DHCP Server) or not (Static IP)

WiFi Enabled: Communicate over WiFi

SSID: WiFi name

WiFi Password: Password

WiFi IP Address: Obtained from administrator

WiFi Subnet: Obtained from administrator

WiFi Gateway: Obtained from administrator

DNS 1 / 2: Obtained from administrator