

# Sentinel

Integrated monitoring  
and control system

## INSTALLATION AND OPERATING INSTRUCTIONS

(Rev.0.3)



Images are for illustrative purposes only

# **Sentinel**

## INSTALLATION AND OPERATING INSTRUCTIONS

20250507

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# **Sentinel**

INSTALLATION AND OPERATING INSTRUCTIONS

## 1. Manual reading guide

### IMPORTANT!



#### EN: Translation of the original instructions

This product may only be commissioned if these instructions are available to you in an official EU language that you understand and you have understood the contents. If this is not the case, please contact your Lifting Italia S.r.l. contact partner.

### READ THIS MANUAL CAREFULLY

### BEFORE INSTALLING AND USING THE PRODUCT

Retain the technical documentation near the lifting platform for the entire lifecycle of the product. In case of change of ownership, the technical documentation must be provided to the new user as an integral part of the product.

## 1.01. Preliminary information

### NOTICE



This product must be installed and put into operation according to the provisions and regulations in force. Improper installation or improper use of the product can cause damage to people and property, as well as cause the warranty to lapse.

#### FOLLOW THE SUGGESTIONS AND RECOMMENDATIONS TO OPERATE IN SAFETY.

Any unauthorized modification can compromise the safety of the system, as well as the correct operation and the life of the machine. If you have any doubts regarding the correct understanding of the information and contents contained in this manual, contact LIFTING ITALIA S.r.l. immediately.

#### QUALIFIED PERSONNEL.

The product covered by this documentation can only be installed by qualified personnel, in compliance with the attached technical documentation, above all in compliance with the safety warnings and the precautions contained therein.



Technical specifications may be subject to change without notice due to product improvement development.

The drawings included in this manual are to be considered as indicative and are NOT an exact reference to the product concerned.

## 1.02. Personal security and risk recognition

This manual contains safety rules that must be observed to safeguard personal safety and to prevent damage to the property.

The indications to be followed to guarantee personal safety are highlighted by a triangle symbol while those to avoid material damage are not preceded by the triangle. The hazard warnings are shown as follows and indicate the different levels of risk in descending order.

RISK CLASSIFICATION AND RELATIVE GRAVITY OF DAMAGE	
<b>DANGER!</b>	The symbol indicates that the failure to comply with appropriate safety measures causes death or serious physical injury.
<b>WARNING</b>	The symbol indicates that the failure to observe the corresponding safety measures can cause death or serious personal injury.
<b>CAUTION</b>	The symbol indicates that failure to observe the relevant safety measures can cause minor or moderate personal injury or damage to the device.
<b>NOTICE</b>	It is not a symbol of security. It indicates that the failure to comply with relevant safety measures can result in property damage.
<b>INFORMATION</b>	It is not a symbol of security. It indicates important information.

RISIKONIVEAU

If there are multiple levels of risk, the danger warning always indicates the highest one. If a warning is drawn with a triangle to warn of the risk of injury to persons, the risk of possible property damage may also be caused at the same time.

WARNING	
	During installation / maintenance of the platform, the safety functions are temporarily suspended. Therefore all necessary precautions must be taken to avoid personal injury and / or damage to the product.

## 2. Safety and information Signs

### 2.01. DANGER Signs

	GENERAL DANGER		ELECTRICITY DANGER		DANGER FLAMMABLE MATERIAL
	DANGER OF FALL BY A LEVEL		DANGER SUSPENDED LOADS		DANGER OF CRUSHING

### 2.02. PROHIBITION Signs

	GENERIC PROHIBITION		FORBIDDEN TO STEP ON		PROHIBITED TO WALK ON OR STOP IN THIS AREA
---	---------------------	---	----------------------	---	--

### 2.03. MANDATORY Signs

	OBLIGATORY TO WEAR THE PROTECTION HELMET		OBLIGATORY TO WEAR SAFETY SHOES		OBLIGATORY WEAR THE PROTECTIVE GLOVES
	OBLIGATORY TO WEAR EYE PROTECTION		OBLIGATION TO WEAR THE AUDIO PROTECTION		

### 2.04. Information symbols and infographics

	MARK		DRILL AND/OR SCREW		CUTTING AND/OR GRINDING
	MEASURE		APPLY RIVETS		USE SUCTION CUPS
	USE THE HAMMER		LEVELING		USE HOIST

	<b>INFORMATION</b> Symbol that identifies information that is useful to the installer but is not mandatory for the installation, nor does it pose a risk to the user..
	<b>IMPORTANT!</b> Symbol that identifies important information to be scrupulously observed.
	<b>ELECTRICAL CONNECTIONS</b> Symbol that identifies the connection of an electrical component.

## 3. Liability and warranty conditions

### RESPONSIBILITY OF THE INSTALLER

#### IMPORTANT!



Installers are responsible for ensuring compliance with safety procedures at work and any health and safety regulations in force in the country and on the site where the assembly is carried out.

The persons authorized to carry out installation, maintenance, and rescue operations are those in possession of an elevator maintenance authorization certificate, issued according to the regulations in force in the country where the assembly is carried out.

The elevator / platform (and each of its components) is produced and intended to be installed as described in the attached project drawing and in this manual; any divergence from the prescribed procedure may affect the operation and safety of the system and cause the immediate cancellation of the warranty.

Any modification or variation made to the project and the assembly Instructions must be documented in detail and referred to LIFTING ITALIA S.r.l., in order to allow the company an adequate assessment. Under no circumstances can a modified system be activated without the express authorization of LIFTING ITALIA S.r.l.

The elevator / platform must only be used in the way envisaged by the system and illustrated in the relative manuals (transportation of people and / or things, maximum loads, cycles of use, etc.). LIFTING ITALIA S.r.l. assumes no responsibility for damage to persons and property caused by improper use of the system.



Pictures and images on this manual are for illustration purposes only.

## 4. General requirements and installation site management

### 4.01. General requirements

#### IMPORTANT!



For more information on safety, liability and warranty conditions, receipt and storage of material on site, packaging, waste disposal, cleaning and storage of the product; refer to the "SAFETY INSTRUCTIONS AND SITE MANAGEMENT" manual.

#### NOTICE



##### PRELIMINARY CHECKS.

Once the packaging has been opened, check that the product is intact and has not been damaged during transport. Should any anomalies or damage be found, please dispatch them in writing on the transport document to the transport company, giving written notice to LIFTINGITALIA S.r.l.

#### WARNING



##### SAFETY AND SITE MANAGEMENT - OVERALL DISPOSITIONS:

1. Always secure tools and any objects against falling;
2. Pay the utmost attention to all the steps described in this;
3. While assembling the parts making up the system or after installation, be careful of any sharp burrs (machining residues).

- Before proceeding with the installation, it is necessary to remove any rubble and material deposited during the construction of the shaft.
- Only nuts and bolts included in the supply must be used.
- The bags containing the screws must be opened in correspondence with the respective operating phases indicated in this manual.
- The instructions described in this manual refer to a reinforced shaft, to a fastening with mechanical expansion plugs of the stud type. For the use of plugs in masonry other than the reinforced concrete see the attachment to this manual. For the shafts with metal framework, we proceed by replacing the plugs with normal screws.
- In these instructions and on the wiring diagram, the stops are indicated with 0, 1, (2, 3 etc.), meaning "0" the lowest stop: the numbers on the push-button panels may be different according to the user's needs (for example - 1, 0, etc.)..

#### CAUTION



The assembly must be performed by a  
MINIMUM 2 people



Use a suitable lifting equipment for handling  
the components if the load is greater than  
50kg



## 5. In-panel installation

### WARNING



#### RISK OF ELECTROCUTION:

Before carrying out any operation, make sure that safety regulations for electrical installations are followed and wear appropriate PPE.

### 5.01. System requirements

Please check these minimum requirements before installation:

MASTER IOT app: Android 12 or next

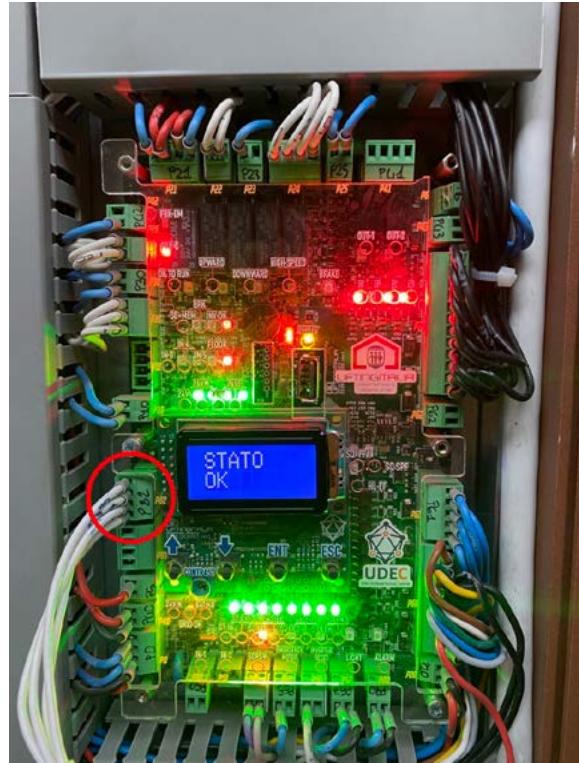
WiFi: 2.4 GHz

GSM: 3G/4G

UDEC: Firmware ≥ 2.28.0

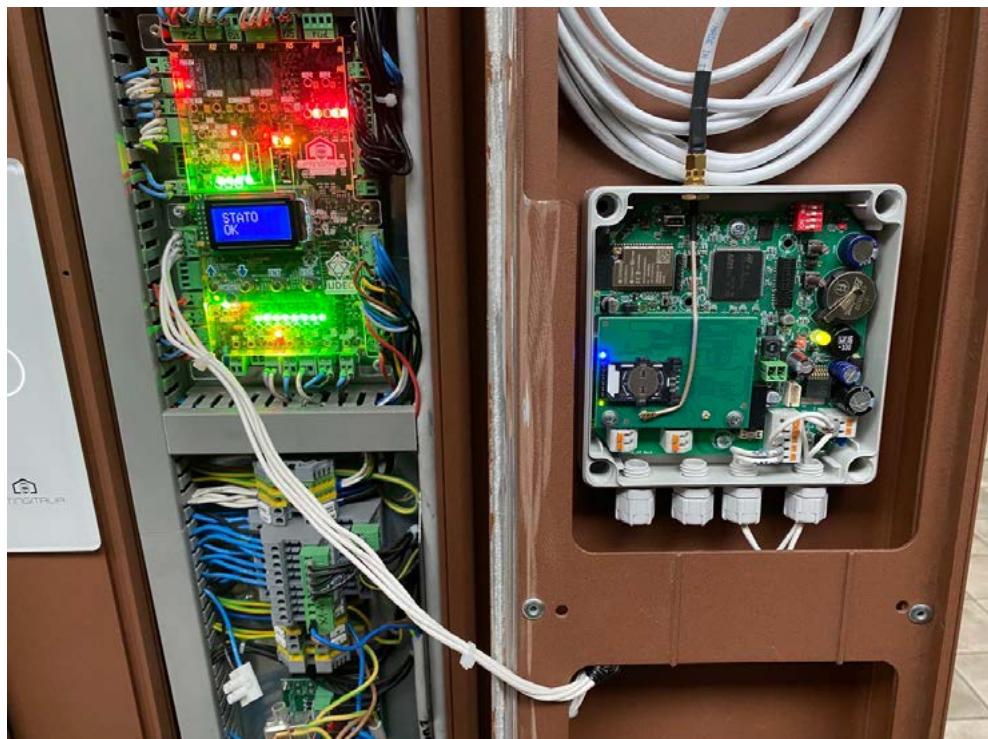
### 5.02. Wiring

Use the cable in the kit and connect the end connected to P82 of the UDEC.M board, the other end as follows in the picture below.



## 5.03. Sentinel box fixing

The Sentinel box will be fixed inside the cabinet in the free space of the metal cover, near the UDEC board. Open the machine's electrical panel, locate a suitable space, and verify that the new footprint does not compromise the panel's closure before proceeding with the removal of the double-sided adhesive labels. It is recommended that the board be oriented with the antenna "pigtail" facing up and the glands from which the wiring exits facing down, as shown.



## 5.04. WiFi/GSM antenna attachment

Prepare a new hole in the UDEC panel cover for the antenna cable to pass through, then attach the antenna to the machine directly on the hole as shown in the pictures below, alternatively use the metal bracket provided to attach the antenna at will.

In case of outdoor installation, make sure that the new hole does not compromise the watertightness of the switchboard by using the rubber sheath provided with the antenna.



## 6. Preliminary configuration

### 6.01. IoT Gateway App > MASTER IOT app

Download and install the MASTER IOT app (minimum Android 12) from the link in your personal area of the customer portal (see § 7.1) or by scanning the QR code in the installation and update instructions in the Sentinel kit, on the device you will use to configure the system.

We recommend following the app installation guide before proceeding with the instructions below.

#### 3.0.01 PREREQUISITES

To use the "MASTER IOT - Configurator" app, it is necessary to have an Android device with at least Android 12 and to have properly connected the Sentinel board to UDEC board.



The connection via GSM/LTE requires the activation of the SIM card on the board, which is done upon request by communicating the serial number of the Sentinel board to Arealifting staff.  
GSM connection requires a subscription data plan.



### 6.02. CONNECTION VIA GSM/LTE - SIM ACTIVATION

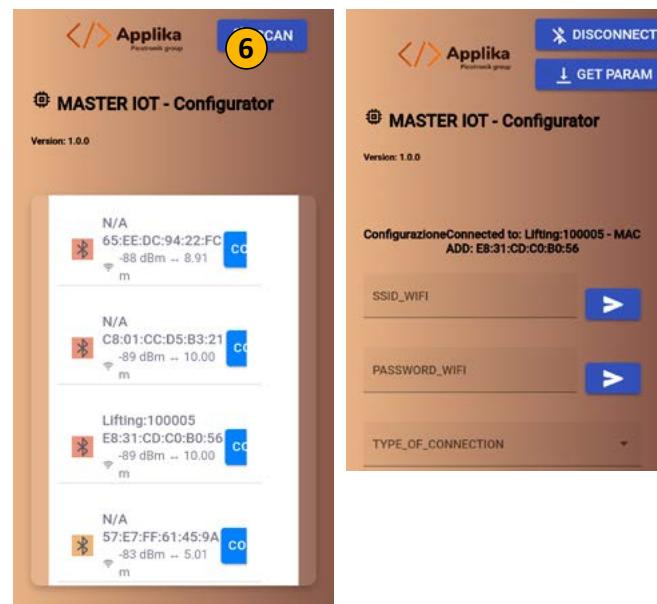
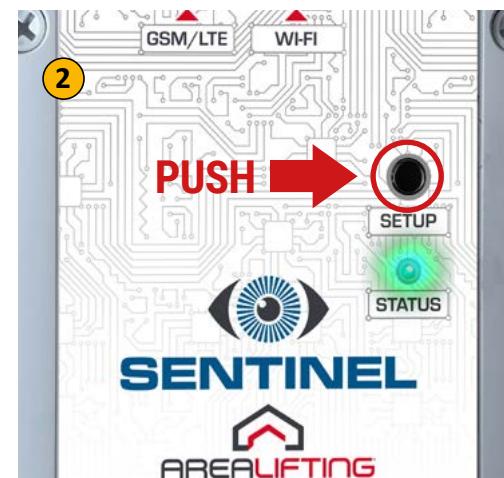
#### IMPORTANT!



To activate the connection via GSM/LTE, it is necessary to send an E-MAIL to the following address [info@arealiftng.com](mailto:info@arealiftng.com) specifying in the subject line: "**SIM ACTIVATION REQUEST - SENTINEL for platform No...**", which will be followed by the invoice regarding the 5 years subscription.  
Only upon receiving the payment we will proceed with the SIM card activation.

## 6.03. Sentinel connectivity configuration

- 1 Disconnect the mains voltage so that the Sentinel board is turned off.
- 2 Hold down the srtup button on the lid (next to the two-color LED) or open the box and press the button shown in the figure
- 3 Power the board while holding down the setup button
- 4 Wait for the LED to turn orange before releasing the button (usually takes 5/6 seconds).
- 5 When the LED will start flashing with green color is signal that BLUETOOTH is active (it takes a few seconds).
- 6 From terminal (tablet or smartphone) open the MASTER IOT app and press the "SCAN" button to scan nearby Bluetooth devices.
- 7 Select the device with the name "Lifting:SERIAL" (the serial of the Sentinel board can be found on the side of the box)
- 8 Set the desired connection type (GSM or WiFi). In the case of a GSM, check with LiftingItalia support to see if the data plan has been properly registered and activated; no configuration work via the app will be necessary.  
In case of WiFi connect to the device and fill in the forms with the connection data of the WiFi network you want to connect to, send them to the device and then press the "DISCONNECT" button.
- 9 At the end of the previous step, the Sentinel board will automatically reboot and attempt to connect to the server, taking 50 to 100 seconds, during which time the status LED will flash red until the connection is made, which will be signaled by the steady green color of the LED.



	<p>Changing the Sentinel connection mode requires connecting the antenna to the correct connector, moving it from the WiFi connector to the GSM connector or vice versa, following the label directions. Stow excess wiring in the slots on the footplate posts.</p>
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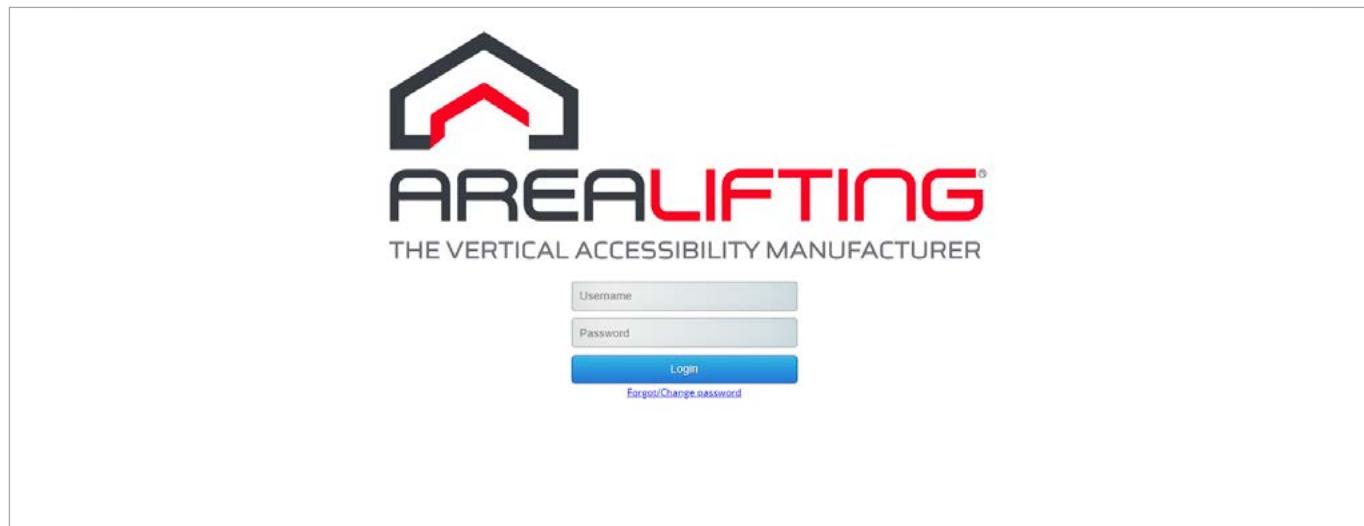
# Sentinel

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## 7. Sentinel control panel connection

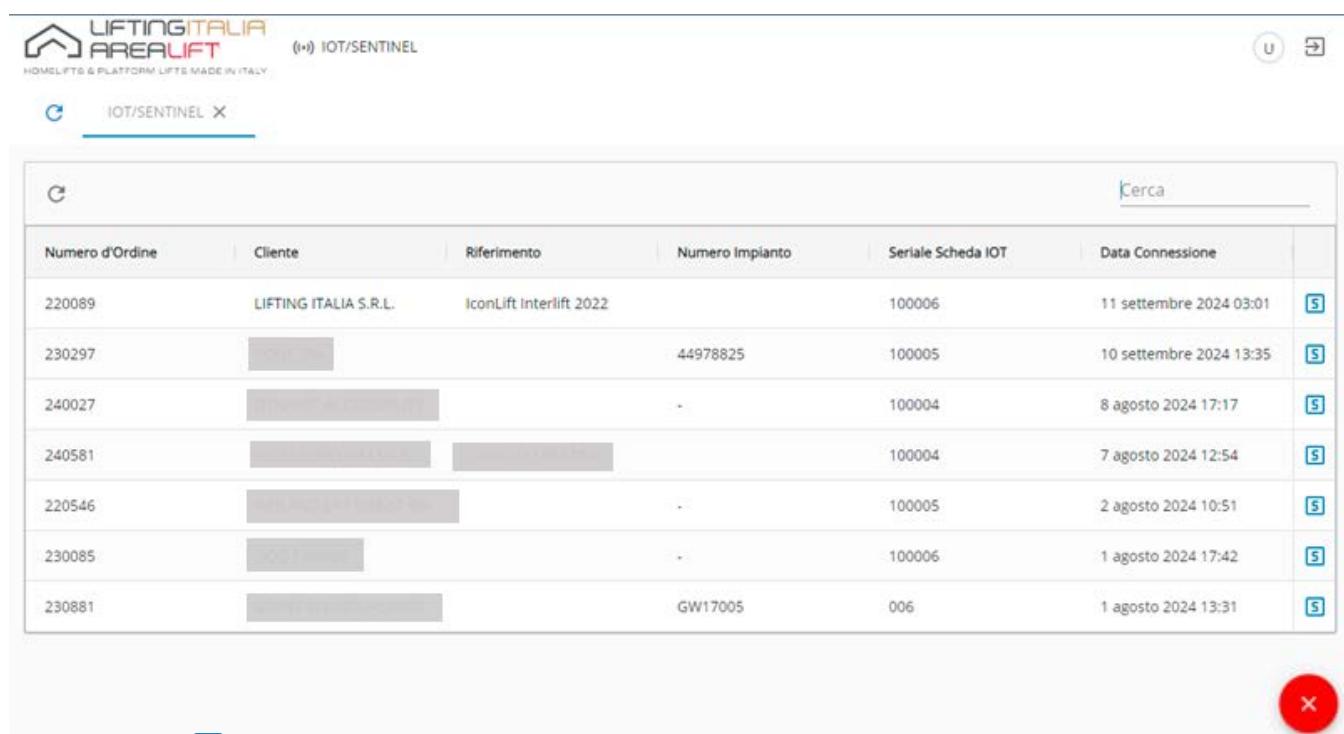
### 7.01. Login

With the credentials provided log in to the "Fusion" portal



### 7.02. Machine fleet

After logging in, a table with a list of machines with the Sentinel system installed and activated will be shown on the screen

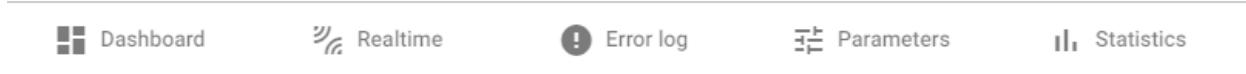


Numero d'Ordine	Cliente	Riferimento	Numero Impianto	Seriale Scheda IOT	Data Connessione	
220089	LIFTING ITALIA S.R.L.	IconLift Interlift 2022		100006	11 settembre 2024 03:01	
230297			44978825	100005	10 settembre 2024 13:35	
240027				100004	8 agosto 2024 17:17	
240581				100004	7 agosto 2024 12:54	
220546				100005	2 agosto 2024 10:51	
230085				100006	1 agosto 2024 17:42	
230881		GW17005	006		1 agosto 2024 13:31	

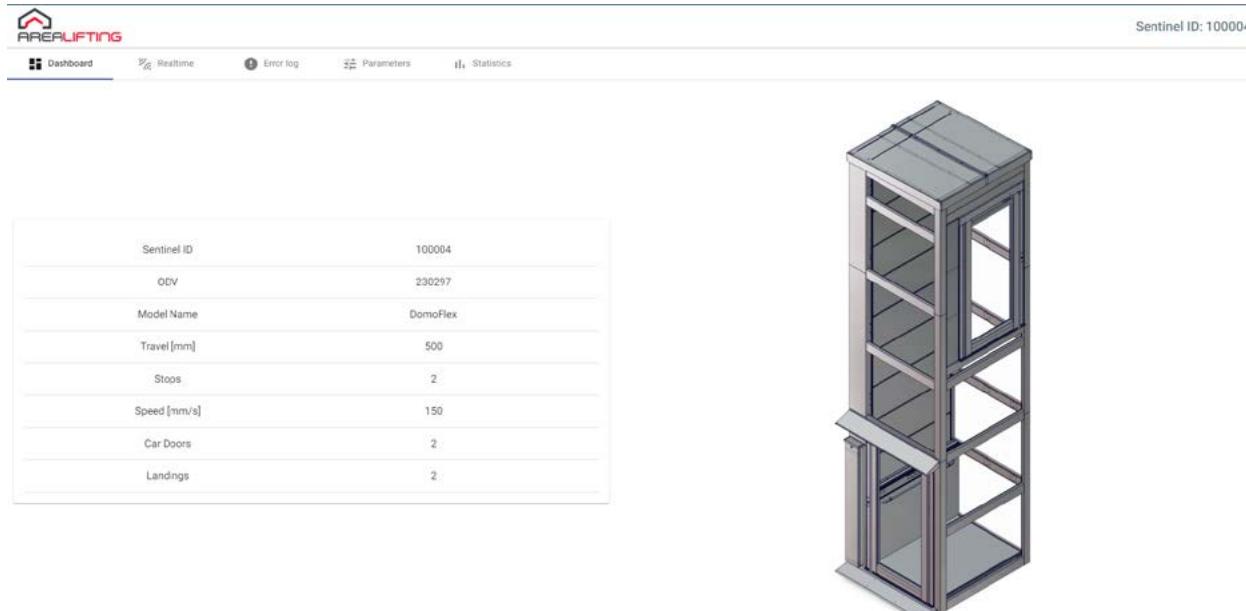
Clicking on the  icon will take you to the platform-lift diagnostics screen.

## 7.03. Navigation interface

Select in the navigation bar at the top of the screen the function you want to view



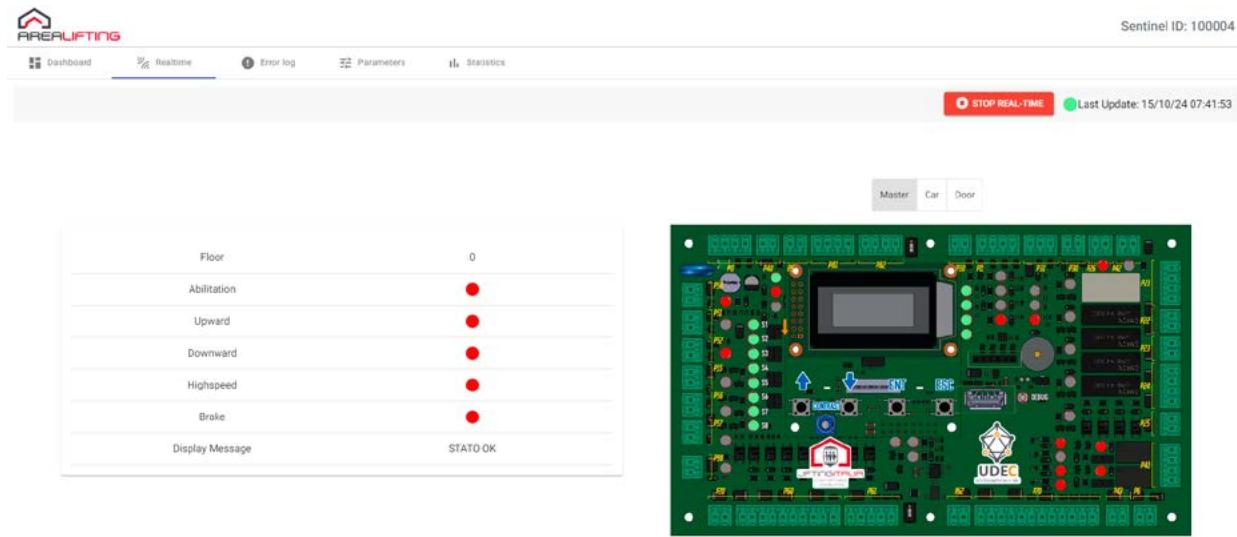
## 7.04. Dashboard



Sentinel ID: 100004

Sentinel ID	100004
ODV	230297
Model Name	DomoFlex
Travel [mm]	500
Stops	2
Speed [mm/s]	150
Car Doors	2
Landings	2

## 7.05. Real-time

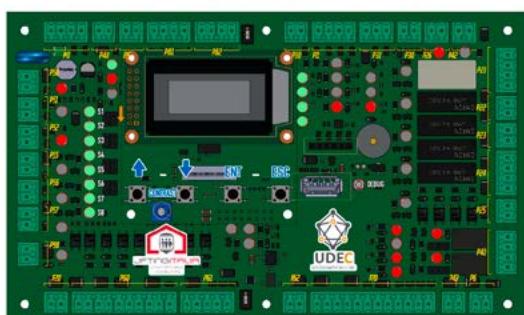


Sentinel ID: 100004

Floor	0
Abilitation	●
Upward	●
Downward	●
Highspeed	●
Brake	●
Display Message	STATO OK

STOP REAL-TIME      START REAL-TIME      Last Update: 15/10/24 07:41:53

Master    Car    Door



In this screen you can view the general status of the machine, the messages shown in the in-panel display, and the status of the board LEDs. To activate the real-time connection click on the **START REAL-TIME** button and wait for the status led to turn green **STOP REAL-TIME** **Last Update: 03/09/24 12:28:31**.

Now the real-time connection is active, to disable it click the button again.

# Sentinel

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Select the tab to be displayed on the screen by clicking on the selector in the figure below



### 7.06. Error Log

ERROR ID	STATUS	POSITION	MOVEMENT	CAR STATUS	DATETIME
ERR_B042 Extracor	0	0	3807	224	15/10/24 06:05:30 UTC
ERR_D110 CAN D 1	7	0	3807	1248	15/10/24 06:05:20 UTC
ERR_B041 QF-SER	16	212	1	21728	15/10/24 06:05:10 UTC
ERR_B042 Extracor	0	0	3807	224	15/10/24 06:05:00 UTC
ERR_B042 Extracor	0	0	3807	224	15/10/24 06:04:50 UTC
ERR_C022 Madrevit	5	0	15	21728	15/10/24 06:04:40 UTC
ERR_C022 Madrevit	5	0	15	21728	15/10/24 06:04:30 UTC
ERR_D111 RCAN 1	0	0	3807	1024	15/10/24 06:04:20 UTC
ERR_B042 Extracor	0	0	3807	224	14/10/24 13:44:00 UTC
ERR_B041 QF-SER	16	212	1	21728	14/10/24 12:13:10 UTC
ERR_B042 Extracor	0	0	3807	224	14/10/24 12:13:00 UTC
ERR_C022 Madrevit	5	0	15	21728	14/10/24 12:12:40 UTC
ERR_C022 Madrevit	5	0	15	21728	14/10/24 12:12:30 UTC
ERR_D111 RCAN 1	0	0	3807	1024	14/10/24 12:12:20 UTC
ERR_C011 RCAN CAB	0	0	3807	1024	14/10/24 12:12:10 UTC

From this screen you can read the error history, with some additional information for use by Arealifting technicians regarding the status of the machine at the time the error occurred

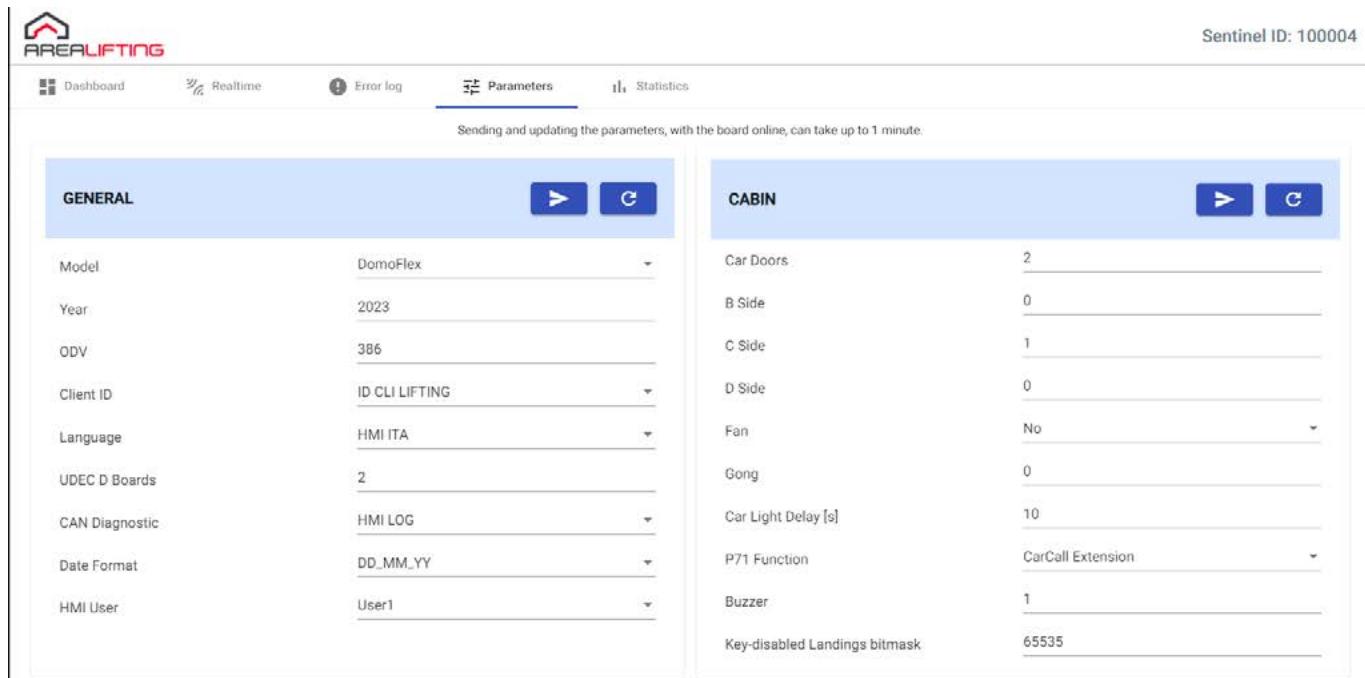


**"DATETIME"** indicates the UTC time the message was received, not the time the error occurred, which may be different

If the system is in error you can send a reset to the board by clicking . This action will not delete the error history: it will simulate reset from panel.

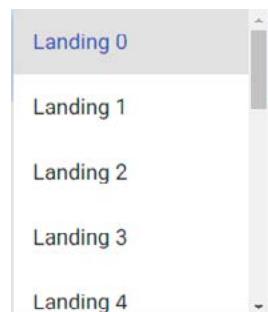
## 7.07. Parameters

Screen through which depending on your user permissions you can view all machine parameters and possibly change them if you have the necessary permissions.



GENERAL		CABIN	
Model	DomoFlex	Car Doors	2
Year	2023	B Side	0
ODV	386	C Side	1
Client ID	ID CLI LIFTING	D Side	0
Language	HMI ITA	Fan	No
UDEC D Boards	2	Gong	0
CAN Diagnostic	HMI LOG	Car Light Delay [s]	10
Date Format	DD_MM_YY	P71 Function	CarCall Extension
HMI User	User1	Buzzer	1
		Key-disabled Landings bitmask	65535

In the landing table it is possible to select which machine landing to display, to select the desired landing click on the table title and select in the drop-down menu the desired option.



### 3.0.02 REMOTE PARAMETER EDITING PROCEDURE

This operation can be performed only with Arealifting authorized technician and requires an on-site operator with access to the machine's udec panel.

On the UDEC board, the operator should set the "IOT MODE" via HMI ti menu and verify that "IOT MODE ACTIVE" appears in the notifications in HMI and that the Sentinel board status LED is solid green.

By editing the parameters individually in the desired tables, it will then be possible to send them to the board via a quick double-click on the **>**

After a few seconds, the operation will be finished and it will be possible to check the new parameters of the board with a refresh by pressing **c**



reading the newly changed parameters could take up to a minute



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