

User manual

eleonS1

Installation and Configuration

Controller:

**NEW LIFT
FST / FST2XT**



Monitoring. Made **easy**.

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About

The **eleon S1** is a universal gateway for connecting elevators for monitoring, remote monitoring and maintenance purposes. It is compatible with a wide range of elevator control systems and provides operation- and maintenance-relevant information to elevator companies via an MQTT interface. The following document contains descriptions, explanations and graphics and serves as a guide for the installation and commissioning of the **eleon S1** gateways for the respective elevator control system.

Scope of delivery

- **eleon S1** – universal elevator gateway
- **eleon C1-RTS** – connector box
- antenna
- D-Sub9 cable
- RJ45 patch cable
- CAN / power connector
- Velcro mounting set

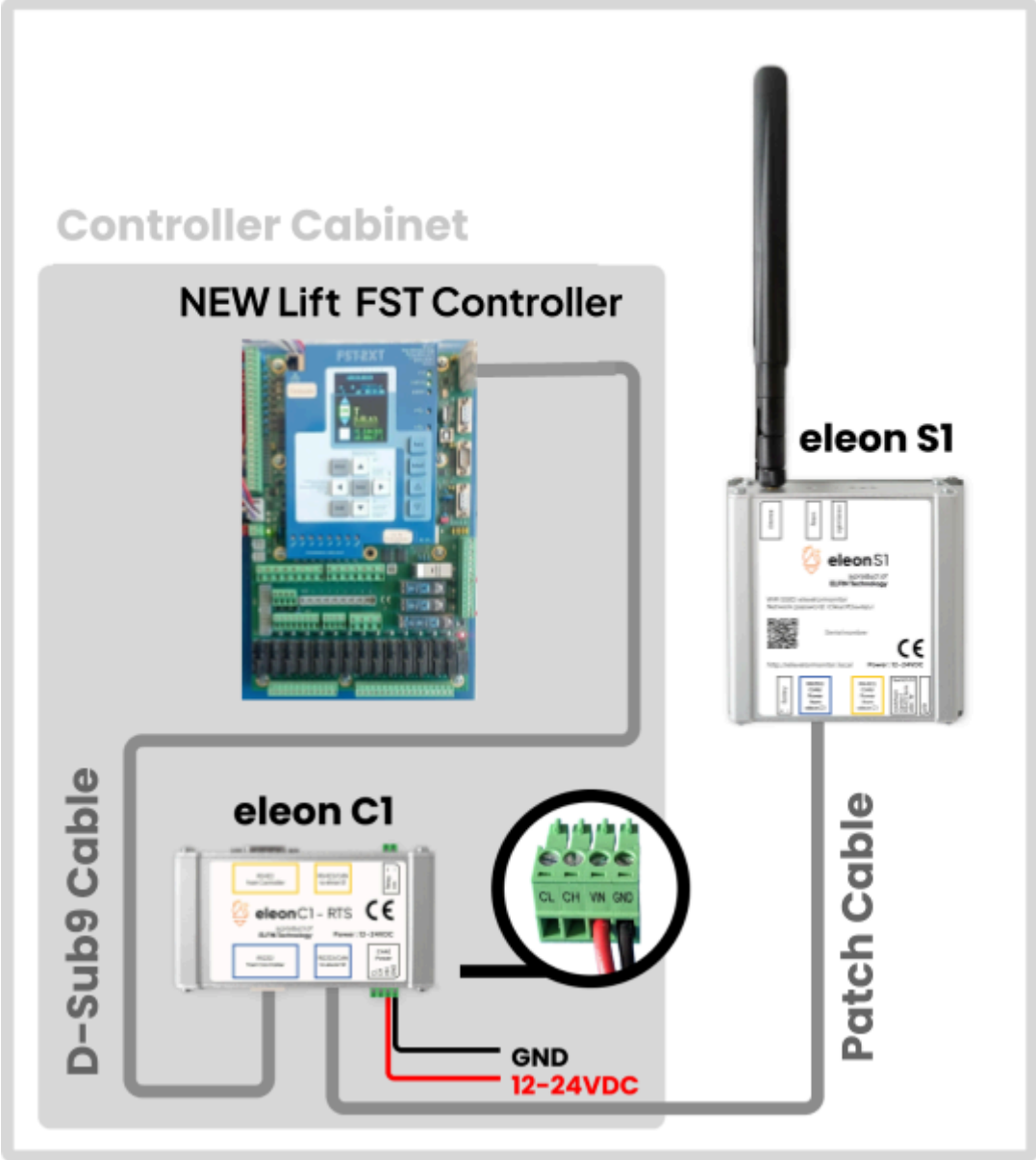
Requirements and referred documents

- The eleon products must only be used, installed, operated, unmounted and configured by **trained and authorized specialists** in electrical engineering and elevator technology.
- Before performing any work on the controller, ensure that the **power is switched off** and ensure a de-energized state for the duration of the work.
- The responsible technician needs to read the **package leaflet**.
- The responsible technician needs to read the **controller identification manual** to identify the controller type and choose the installation and configuration manual accordingly.
(provided on **eleon.elfin.de**).
- Only original components (cables, adapters, connectors, etc.) supplied and/or approved by ELFIN Technology GmbH may be used for installation.
- In order to safely install the **eleon S1**, use wires with a cross-section of 0.25 mm² to 0.75 mm² (AWG23–18) for the connection of the power supply.

Procedure for installation

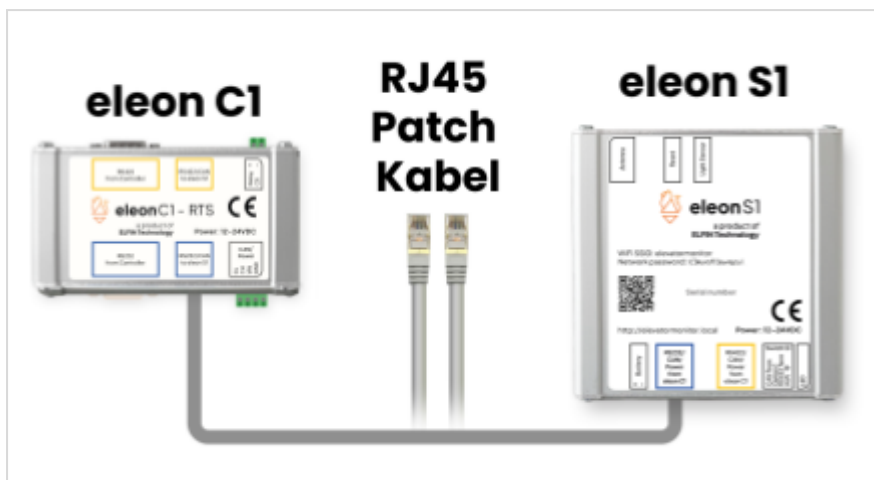
Schema

Machine Room



1. Wiring

1. Locate a 12–24V DC (200mA at 24V) power source inside the machinery to power the gateway.
2. For safety reasons, turn off the power supply completely.
3. Install the **eleon C1-RTS** in the control cabinet and connect the power supply (Power) and ground (GND) to the 12–24 V power source.
4. Route the cables neatly and securely to the installation location of the **eleon C1-RTS**. The **eleon C1-RTS** is typically installed inside the control cabinet.
5. Connect the power cable to **eleon C1-RTS** by using the green plug. Vin: 12–24 VDC GND: to the ground
6. Connect **eleon C1-RTS** with **eleon S1** by using the RJ45 patch cable and the blue labelled connector (RS232):



7. Attach the antenna to the **eleon S1**.

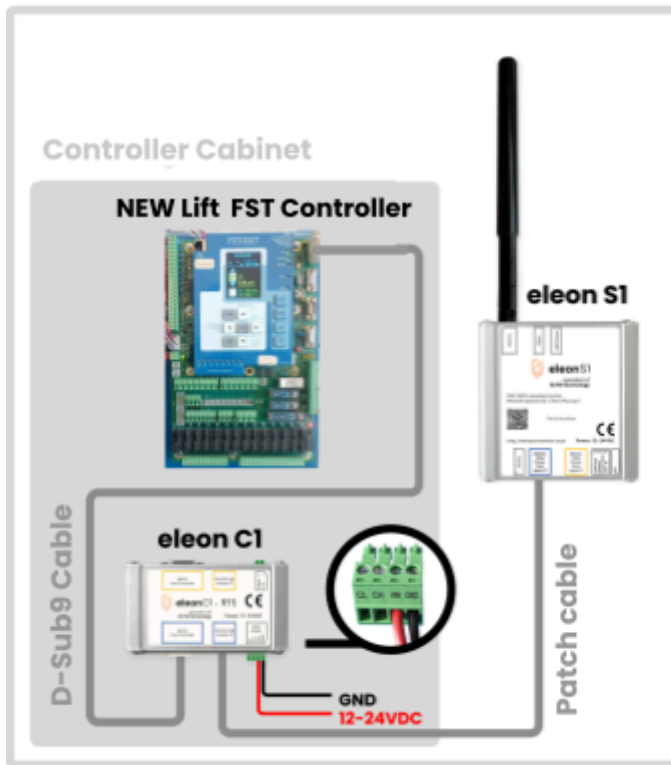


8. Locate the D-Sub9 connector on the controller board.



9. Use the D-Sub9 cable to connect the control unit to the **eleon C1-RTS** via the blue-marked port.

Machine Room



10. Turn on the power of the controller and **eleon S1** will start automatically.

11. Check green LED on the bottom of **eleon S1**.

→ 1x per second blinking:

normal operation.
Proceed with the next step.

→ off or irregular blinking:

not operational:
see *chapter 3: Troubleshooting*
section 1

→ Fast blinking
(4x per second):

modem is scanning for
networks.
Proceed with the next step.



2. Configuration

1. Controller configuration

Check the baud rate setting in the control system menu:

Menu → System → Factory Menu → Settings → Ser. X9 Baud → 38400 bps

2. Setting up the gateway

1. Once the eleon S1 is wired and powered on, the WiFi is automatically activated for 30 minutes. If the WiFi network is no longer active, it can be reactivated for another 30 minutes by toggling switch 4.



2. Connect to the WiFi network

→ WLAN SSID: **elevatormonitor**

→ Password: *look at **eleon S1***

(Achtung: Das Passwort enthält Zahlen, Buchstaben und Sonderzeichen)

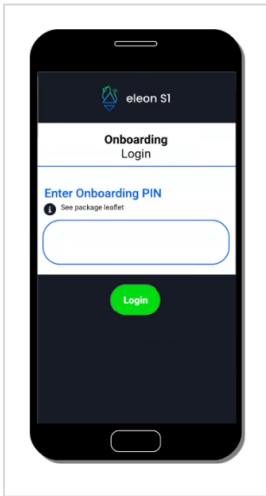
3. Visit the local onboarding website.



→ iOS and Android: <http://elevatormonitor.local> or scan the QR code

→ For Android devices prior to version 12: please enter the following IP address in your browser: 192.168.4.1

4. Access the website using Onboarding PIN (see package leaflet).



5. Check signal strength.

→ 8 or above 8:

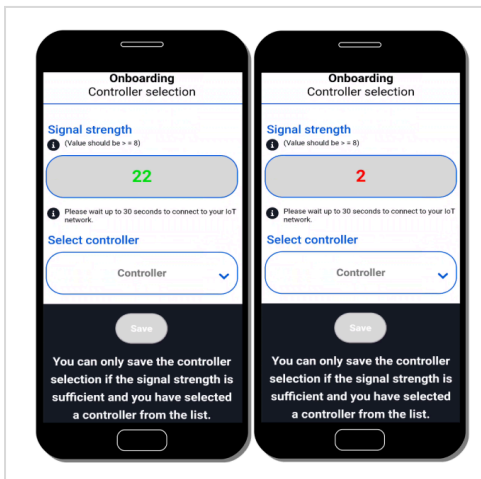
Proceed with the installation. Select Controller and click “Save”.

→ Below 8:

Change the tilt of the antenna (0°, -45°, -90°, +45°, +90°). Adjusting the antenna tilt should show changes within 5 seconds.

→ Still below 8:

Change the position of **eleon S1**.

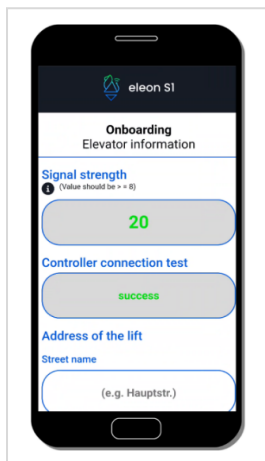


6. If signal strength is sufficient, use two stripes of the velcro mounting set to mount **eleon S1** in its final position and make sure that the signal strength is still sufficient.
7. Choose the **NewLift FST** or **NewLift FST-2XT** controller from the dropdown menu on the website.

- Click on "Save". The **eleon S1** will now restart and the website for Onboarding will be updated.

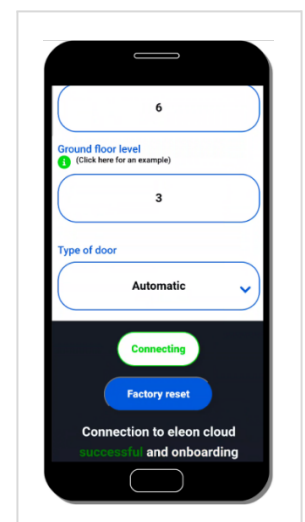
In case of issues please see chapter 3: Troubleshooting section 2.

- Check if the connection to WiFi "elevatormonitor" is active. *If not, please connect to WiFi using the SSID and PW (printed on **eleon S1**). Enter the onboarding website by using the QR-Code on **eleon S1**, the URL <http://elevatormonitor.local> or 192.168.4.1. In the loaded login screen enter the Onboarding Pin (see package leaflet).*
- Check signal strength (see above in section 5 for pictures and details).
- eleon S1** performs a controller connection test and the website shows if the controller connection was successful or not.



In case controller connection has failed: see chapter 3: Troubleshooting – section 4.

- Enter the specific elevator information on the configuration page and click "Save." The device will then connect to the cloud. A successful data transmission will be confirmed on the page, and the data will be sent to the portal specified in your order.
- You can now set up the device in your company's portal and perform a test run to verify the data transmission.
- Congratulations! Installation is done.



3. Troubleshooting

3.1. Blinking LED 1st boot



→ 1x per second blinking

Normal operation. Continue with the installation.

→ Off:

not operational.
- Check the power supply connection (make sure that there is enough power available - "min. 200mA at 24 V").

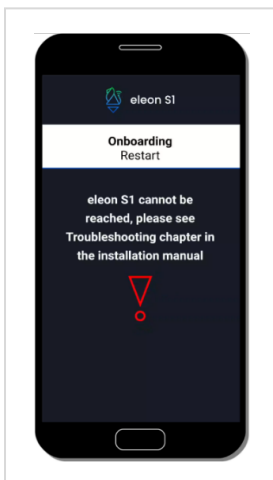
→ Irregular blinking:

not operational.
- Check the power supply connection (make sure that there is enough power available - min. 200mA at 24 V)
- Check for reversed polarity, wiring short circuits, or broken wires.
- Check for suspicious noises in **eleon C1-RTS** or **eleon S1**.

→ Fast blinking (4x per second):

Modem is scanning for networks. Continue with the installation.

3.2. Troubleshooting after reloading website



If the website does not refresh automatically:
Check whether the connection to the WiFi network "elevatormonitor" is active. If not, connect to the WiFi using the SSID and WiFi password (see eleon S1). You may need to log in again on the website using the onboarding PIN (see enclosed leaflet).

If the website still does not refresh, check the blinking pattern of the green LED:

→ 1x per second blinking:

Normal operation. Continue with the installation.

→ Off:

not operational.

- Check power connection (verify if sufficient power is provided "200mA at 24V").
- Check for reversed polarity, wiring short circuits, or broken wires.
- Check for suspicious noises in **eleon C1-RTS** or **eleon S1**.

→ Irregular blinking:

not operational.

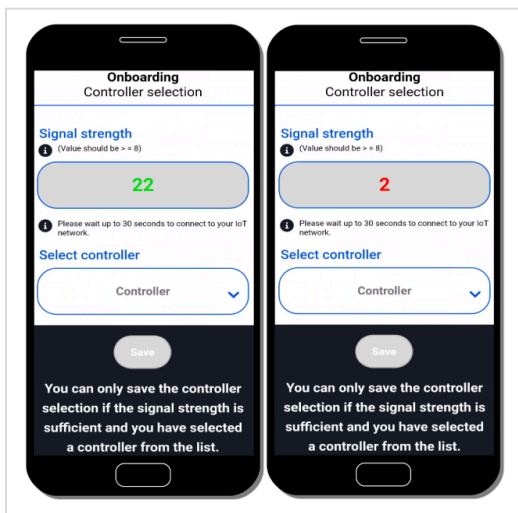
- Check for reversed polarity, wiring short circuits, or broken wires.

→ Fast blinking (4x per second):

Modem connection problems.

- Proceed with diagnostics on local website elevatormonitor.local

3.3. Check signal strength



→ 8 or above 8:

Proceed with the installation. Select Controller and click "Save".

→ Below 8:

Change the tilt of the antenna (0°, -45°, -90°, +45°, +90°). Adjusting the antenna tilt should show changes within 5 seconds.

→ Still below 8:

Change the position of **eleon S1**.

3.4. Failed controller connection test

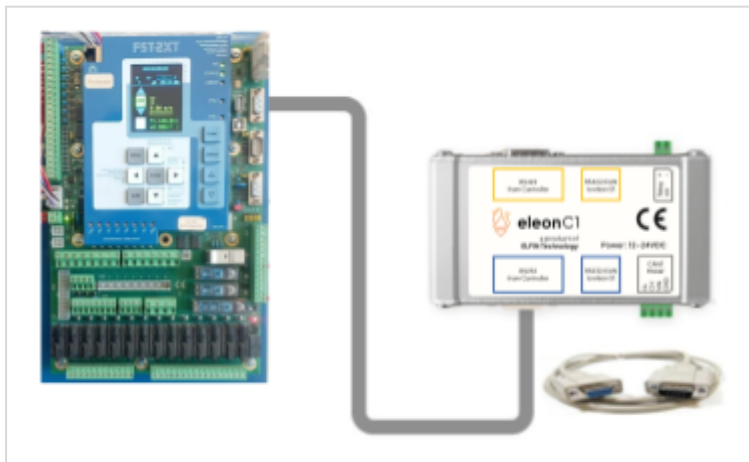
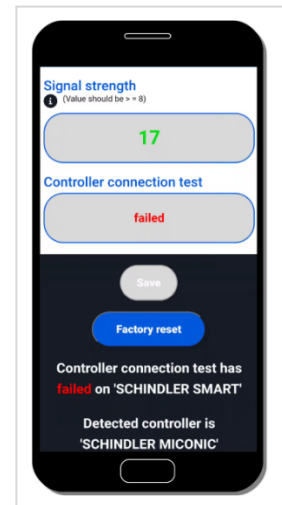
3.4.1. Check if the right controller is selected. If the wrong controller is selected, follow these steps to fix the problem:

- Delete the wrong configuration by clicking "Reset" on the website to make the **eleon S1** reboot.
- Check the WiFi connection: Make sure the connection is active and log in again on the onboarding page if necessary.
- Use the onboarding PIN: Enter the onboarding PIN (see enclosed leaflet) to access the website.

- Select the correct control system: Make sure the correct control system is selected and click “Save.”
- Follow the instructions in Chapter 2, Section 9.
- Repeat this troubleshooting process: This process can be repeated as often as necessary until the correct control system is selected.

If you are sure, you have selected the right controller, but the controller connection test still fails, please continue as follows:

- 3.4.2. Ensure that only cables supplied by ELFIN Technology GmbH are used.
- 3.4.3. Check the wiring of the D-Sub9 cable to controller and **eleon C1-RTS**.



- 3.4.4. Check the functionality of the control-specific interface (see Chapter 2.1) and re-establish the connection between the control system and the **eleon C1-RTS**. Then press the reset button on the **eleon S1**. Restarting the eleon S1 will trigger another test of the control system connection.



Contact

Even an extensive documentation cannot answer every question. Do you still have questions or suggestions concerning our **eleon S1** universal elevator gateway?

Please have the following information ready for our customer support:

- customer name
- adress of installation site
- **eleon S1** serial number
- controller type
- if applicable, photo of the controller
- shown signal strength

We look forward to your requests! Please don't hesitate to contact us at:

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