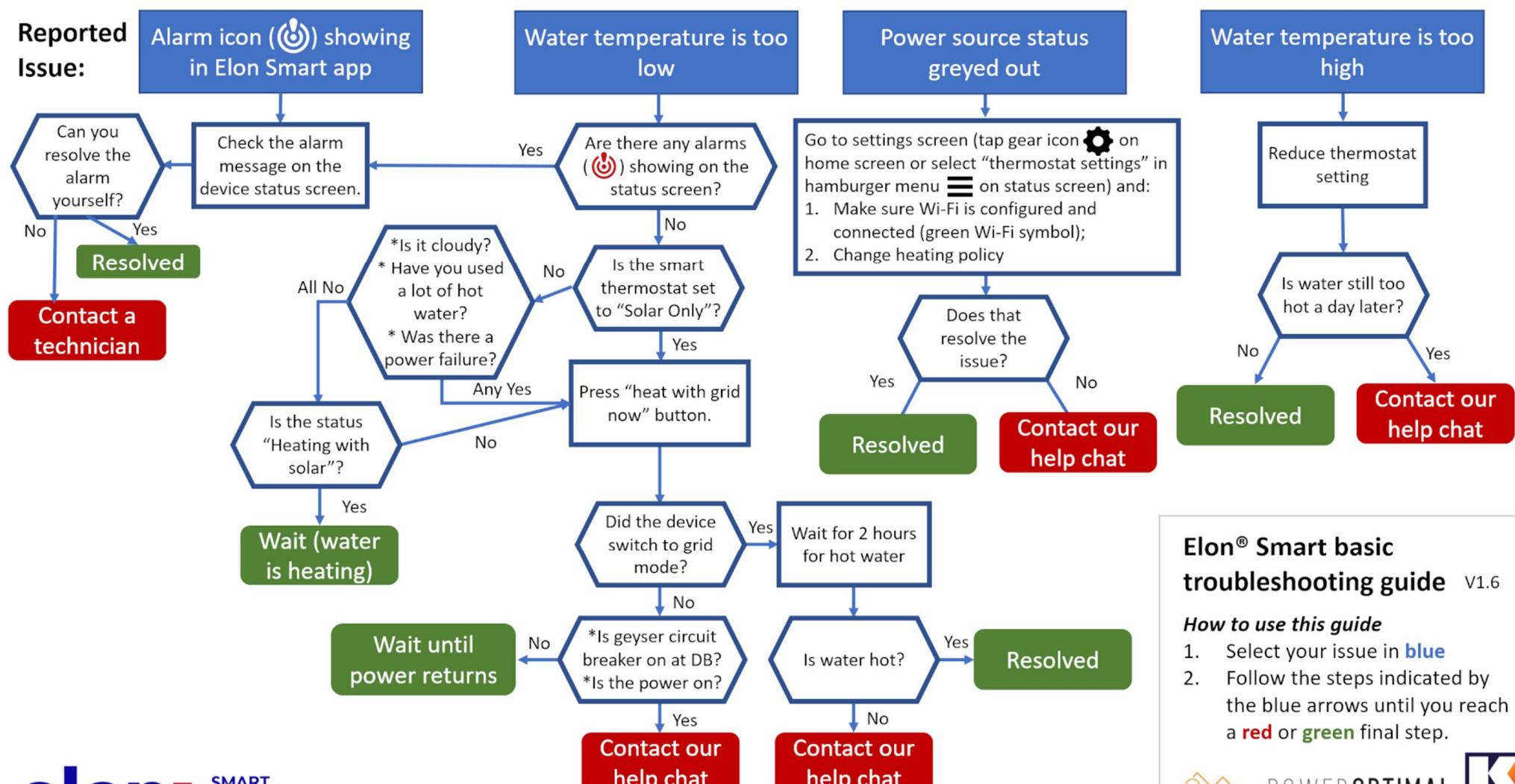


## STEP 1. COLLECT INFORMATION FROM CUSTOMER

Customer Name			
Customer Address			
Date		Elon® serial no.	
What is the issue?			
How long have you been experiencing this issue?			
Have you had any power failures recently?			
Have you used more hot water than usual (such as having guests over), or at a different time than usual?			
Has the weather been cloudy or rainy in the last day or two?			
Any alarms? (Indicated with an emphasised red exclamation mark  on the home screen and with an alarm message on the status screen)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Alarm message
What heating profile is the Elon Smart thermostat set to?			
What are the temperature set points?	Solar	°C	Grid
What is the water temperature?			
Do you have the latest version of the Elon Smart app?			
Position of geyser circuit breaker in DB (distribution board) (X)	On <input type="checkbox"/>	Off <input type="checkbox"/>	Don't know <input type="checkbox"/>
Anything else to note?			

## STEP 2: TROUBLESHOOTING



**elon-** SMART  
HOT WATER  
SYSTEM

Elon® Smart basic  
troubleshooting guide V1.6

## ***How to use this guide***

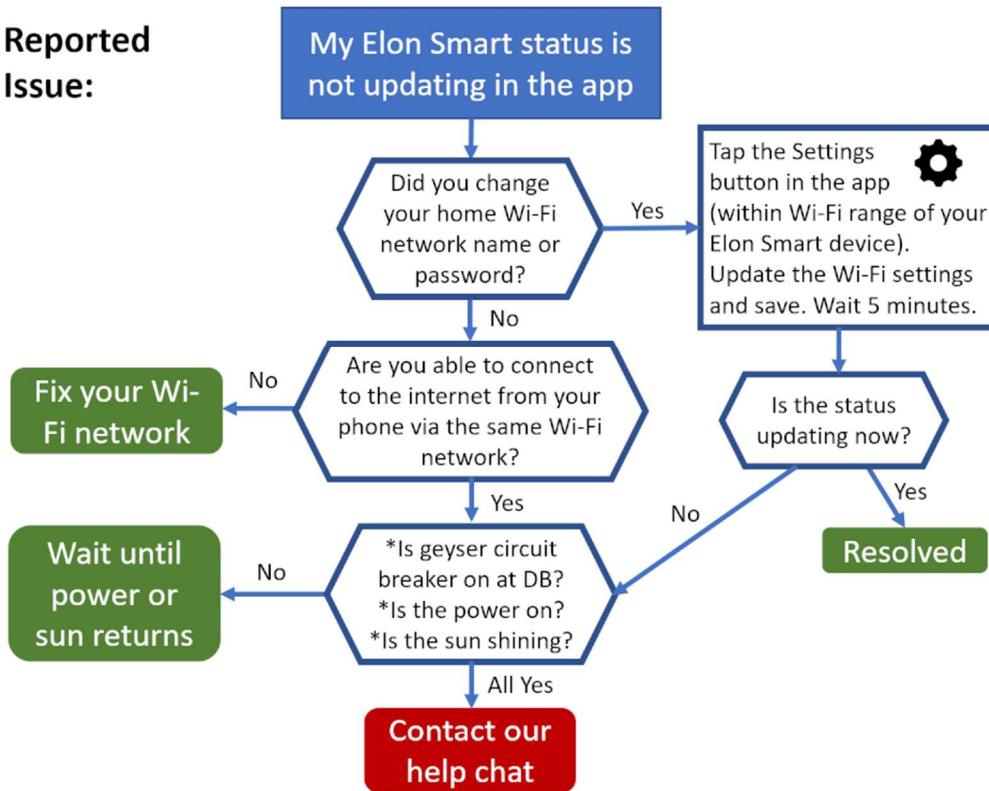
1. Select your issue in **blue**
  2. Follow the steps indicated by the blue arrows until you reach a **red** or **green** final step.



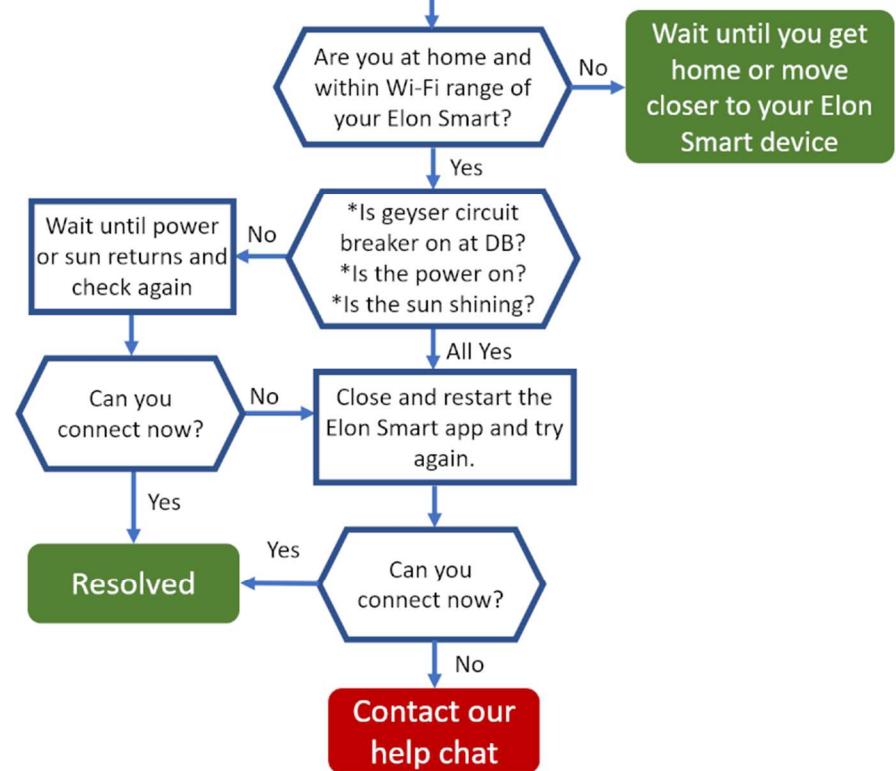
POWER OPTIMAL  
THE FUTURE OF ENERGY



**Reported Issue:**



**Can't connect to my Elon Smart with my phone (via the Settings button or the "Thermostat settings" menu item)**



## Reported

### Issue:

1. The Elon Smart unit might be out of range of your Wi-Fi network. If you can, reposition your Wi-Fi router closer to your geyser. Otherwise, you might need to get a Wi-Fi extender or booster.
2. Check that your Wi-Fi router is not set to only the 5 GHz band, but also the 2.4 GHz band.

Connect to the router's 2.4 GHz band (this is usually the router name without anything added to the end – for example "MYROUTER")

Resolved

Contact our help chat

## My Elon Smart won't connect to my Wi-Fi network

No

Can you see your Wi-Fi network on the list of Wi-Fi networks in the app?

Yes

Are you trying to connect to your router's 5 GHz band? (The 5 GHz band is typically denoted by 5G or 5GHz at the end of the router name – for example "MYROUTER\_5G")

Yes

No

Check your Wi-Fi router security settings (security mode). Is it set to WPA or WPA-PSK security?

No

Change the security mode to WPA2.

Yes

Resolved

Can you connect now?

No

Contact our help chat

Can you connect now?

No

Uninstall and reinstall the app, and reboot the Elon Smart by switching grid power off for 2 min at night.

Resolved

Contact our help chat

Contact our help chat

## "Unhandled exception querying device" error

### 5 things to try:

1. Delete the geyser in the app and rescan the QR code;
2. Go to config screen and change heating policy;
3. Uninstall and reinstall the app;
4. Reboot the home Wi-Fi router
5. Switch off the geyser circuit breaker at the DB at night time, wait for 2 minutes and switch it on again (this will force the Elon Smart to reboot).

Did this clear the error?

Yes

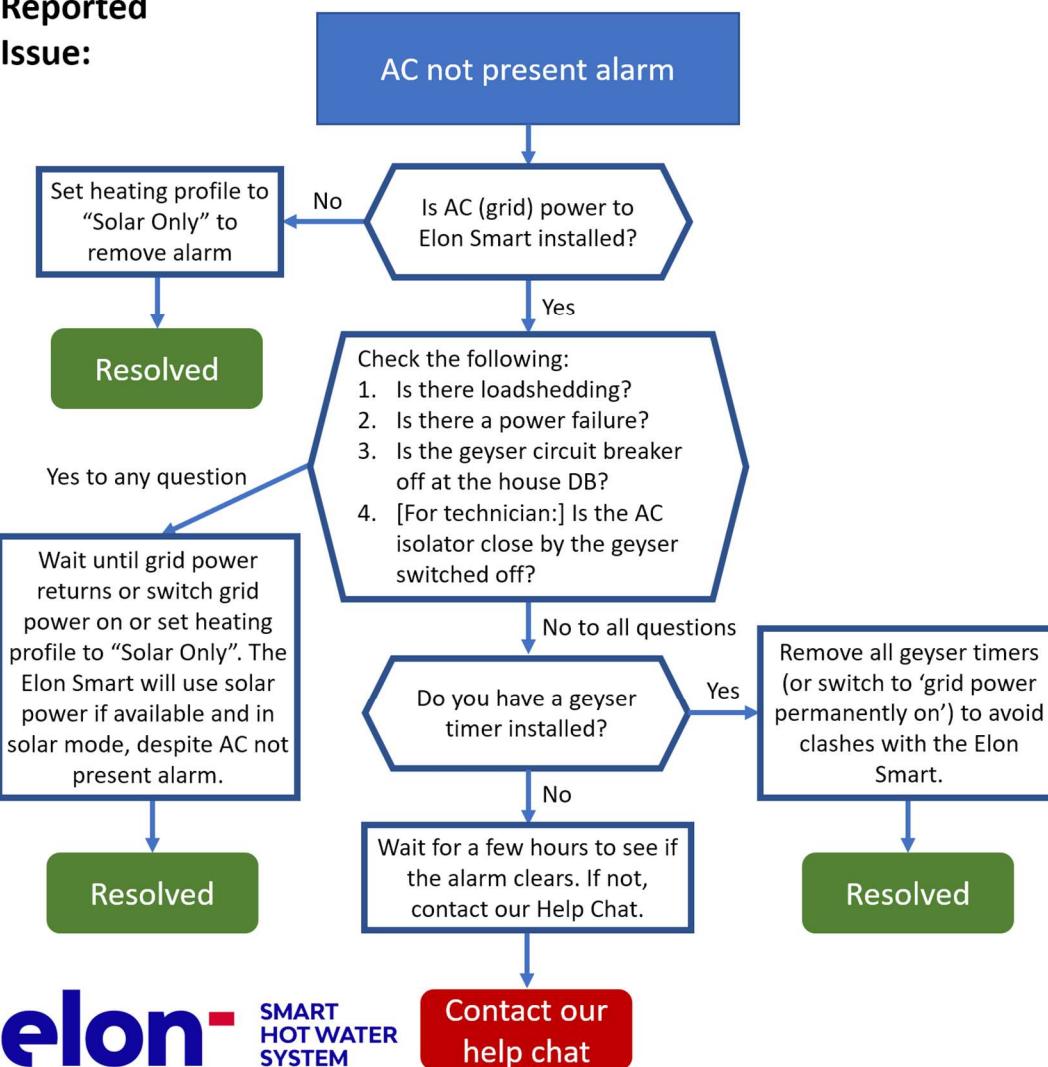
Resolved

No

Contact our help chat

Contact our help chat

**Reported  
Issue:**



**For installers: how to configure the Elon Smart when no home Wi-Fi is available**

You can configure the Elon Smart by connecting directly to it as follows:

1. Scan the QR code to add the Elon Smart to the app.
2. Tap the gear icon on the home screen or select "Thermostat settings" in the menu on the status screen to access the thermostat settings.
3. Configure the thermostat as described in the installation manual (set name, address, temperature set points, heating profile). Skip the Wi-Fi configuration.

The Elon Smart will function without a Wi-Fi connection after configured, but the status screen in the app will not update.

If you want to see the status screen (graphs and temperature) update, provide a mobile Wi-Fi hotspot on a second phone (not the one that you're connecting to the Elon Smart with).

## Alarm messages on the Elon Smart app

ID	Alarm message	How to resolve the alarm: USERS	How to resolve the alarm: TECHNICIANS / ELECTRICIANS
0	Element Faulty	Contact your installer / electrician	<ul style="list-style-type: none"> <li>a. Check that the thermostat is inserted correctly.</li> <li>b. If that does not clear the alarm, measure element resistance and replace if necessary.</li> </ul>
1	Switch Failed	Contact our help chat	Contact our help chat
2	DC Disconnect Failed	Contact our help chat	Contact our help chat
3	AC Not Present	<p>This can be due to several reasons:</p> <ul style="list-style-type: none"> <li>a. There is no AC power connected to the Elon Smart.</li> <li>b. AC power is off at the circuit breaker in the DB board or at the AC isolator close by the Elon Smart unit.</li> <li>c. There is a power failure or loadshedding.</li> <li>d. You have a geyser timer installed.</li> </ul> <p>This alarm won't prevent the Elon Smart unit from functioning and heating water with solar (DC) power as long as there is solar power available.</p> <p>You can clear the alarm by switching the AC power on (where applicable), setting the Elon Smart heating profile to <i>Solar Only</i> or you can leave it until AC power returns.</p>	See to the left
4	Measurement Failure	Contact our help chat	Contact our help chat
5	Disconnected for Safety	When there is a safety-related alarm condition, the Elon Smart will disconnect power from the geyser. To clear this alarm, you need to clear the other safety-related alarm(s).	See to the left
6	Water Temperature Measurement Failure	Contact our help chat	Contact our help chat

ID	Alarm message	How to resolve the alarm: USERS	How to resolve the alarm: TECHNICIANS / ELECTRICIANS
7	Ambient Temperature Exceeded	<ul style="list-style-type: none"> <li>a. Check the installation. If the geyser is installed in direct sunlight, see if you can provide shade to the geyser end space area where the Elon Smart is located.</li> <li>b. Reduce temperature set point by 5 degrees.</li> <li>c. Wait until temperatures cool down. The Elon Smart will start up again.</li> <li>d. Contact our help chat if the above doesn't clear the alarm.</li> </ul>	See to the left
8	DC Wiring Insulation Failure	<p>Contact your installer / electrician.</p> <p>To operate the Elon Smart whilst the insulation fault has not been located and resolved, you can set the heating profile to <i>Grid Only</i> or switch off the DC disconnect switch.</p>	<ul style="list-style-type: none"> <li>a. Check solar panels and DC wiring for insulation faults.</li> <li>b. To operate the Elon Smart whilst the insulation fault has not been located and resolved, you can set the heating profile to <i>Grid Only</i> or switch off the DC disconnect switch.</li> </ul>
9	Insulation Self-Test Failed	Contact your installer / electrician	Check earth wiring. Make sure both earth straps are connected securely to the geyser earth stud.
10	AC Wired to DC Input	Contact your installer / electrician	Wire AC to correct input (see Chapter 4 in the Installation Manual).
11	DC Wired to AC Input	Contact your installer / electrician	Wire DC to correct input (see Chapter 4 in the Installation Manual).

ID	Alarm message	How to resolve the alarm: USERS	How to resolve the alarm: TECHNICIANS / ELECTRICIANS
12	DC Not Present	<p>This can be due to several reasons:</p> <ol style="list-style-type: none"> <li>There is no DC power connected to the Elon Smart</li> <li>DC power is off at the DC disconnect switch close by the Elon Smart unit.</li> <li>There is an issue with the DC wiring or solar PV installation.</li> <li>It is extremely dark and overcast during daytime. (The alarm is not active when the sun is less than 15 degrees above the horizon.)</li> </ol> <p>This alarm won't prevent the Elon Smart unit from functioning and heating water with grid (AC) power as long as there is grid power available.</p> <p>You can clear the alarm by:</p> <ol style="list-style-type: none"> <li>switching the DC power on (where applicable);</li> <li>setting the Elon Smart heating profile to <i>Grid Only</i>;</li> <li>leaving it until DC power returns; or</li> <li>contacting your installer / electrician to inspect and fix the DC wiring and/or solar PV installation.</li> </ol>	See to the left
13	DC Input Reversed	Contact your installer / electrician.	The wiring on the Solar input has been installed incorrectly (in reverse). The DC+ (positive) wire has been connected to the DC- (negative) terminal on the Elon Smart and the DC- (negative) wire has been connected to the DC+ (positive) terminal on the Elon Smart. Swap the DC wires around (see Chapter 4 in the Installation Manual).
14	Hot Connection	Contact your installer / electrician.	Elon Smart not correctly inserted into geyser element. Switch off all power to the Elon Smart and re-seat (reinsert) the Elon Smart.
15	RTC Failed	Contact our help chat	Contact our help chat

ID	Alarm message	How to resolve the alarm: USERS	How to resolve the alarm: TECHNICIANS / ELECTRICIANS
16	Power Unstable	<ul style="list-style-type: none"> <li>a. If it is intermittent or temporary and occurring during loadshedding or grid power failures, you can ignore this alarm.</li> <li>b. If the alarm persists whilst grid power is available, contact your installer / technician.</li> </ul>	<ul style="list-style-type: none"> <li>a. Check that wiring to Elon Smart is properly connected and not loose.</li> <li>b. Check whether geyser circuit breaker in DB or the geyser's AC isolator are faulty or wiring is not properly connected.</li> <li>c. If none of the above are present, then contact our help chat.</li> </ul>
17	Server Not Available	<ul style="list-style-type: none"> <li>a. Check that your home Wi-Fi network has internet connectivity.</li> <li>b. Check the Elon Smart Wi-Fi settings on the thermostat settings screen (access by tapping the gear icon  in the app when at home).</li> <li>c. If your Wi-Fi router is far away from your geyser, the Wi-Fi signal might be too weak. This can be improved with a Wi-Fi extender or signal booster.</li> <li>d. If none of the above works, try rebooting your Elon Smart by switching off the geyser circuit breaker on your house DB board at night for 2 minutes.</li> </ul>	See to the left