



TS2301 Wi-Fi Electric Water Heater Controller

# User Manual





## Table of Contents

<b>1 Welcome!</b>	<b><a href="#">3</a></b>
<b>2 Overview</b>	<b><a href="#">4</a></b>
- What's in the System?	<a href="#">4</a>
- Water Heater Controller User Interfaces	<a href="#">5</a>
<b>3 Using the Water Heater Controller</b>	<b><a href="#">6</a></b>
- Understanding the LED Indicators and Power Button	<a href="#">7</a>
<b>4 Using the Portal</b>	<b><a href="#">8</a></b>
- Understanding the Icons	<a href="#">9</a>
- Using the Icons on the Left Column	<a href="#">10</a>
- On the Dashboard Page (Home Page)	<a href="#">11</a>
- On the Devices Page	<a href="#">12</a>
- Adding a new Water Heater Controller	<a href="#">13</a>
- On the Control Page	<a href="#">21</a>
- On the Energy Usage Page	<a href="#">23</a>
- On the Schedules Page	<a href="#">24</a>
- On the Settings Page	<a href="#">25</a>
- On the Sensors Page	<a href="#">27</a>
- On the Services Page	<a href="#">28</a>
- On the Vacation Page	<a href="#">29</a>
- On the 3rd Party Integration Page	<a href="#">30</a>
<b>5 Using the App</b>	<b><a href="#">31</a></b>
- Using the Icons at the Bottom Row	<a href="#">32</a>
- Tapping on Schedules Icon	<a href="#">33</a>
- Tapping on Info Icon	<a href="#">34</a>
- Using the Menu	<a href="#">35</a>
<b>6 Maintenance</b>	<b><a href="#">36</a></b>
- Factory Reset	<a href="#">36</a>
- Wi-Fi Network Reset	<a href="#">36</a>
- Firmware Update	<a href="#">37</a>
- Cleaning the Water Heater Controller	<a href="#">38</a>
- Troubleshooting	<a href="#">39</a>
<b>7 Feature List</b>	<b><a href="#">41</a></b>



## Welcome!

Thank you for choosing the TrickleStar® TS2301 Wi-Fi Electric Water Heater Controller.

We are your smart partner in maximizing savings for your electric water heater. You can now remotely control your water heating timing and duration from anywhere. You can also monitor the energy usage from a summarized report found in your TrickleStar Portal account.

If you have any inquiries about TrickleStar products or need technical support, visit our website for tutorials, videos and Frequently Asked Questions (FAQ). You can also contact us by email or phone.

Website: [www.tricklestar.com](http://www.tricklestar.com)  
Email: [customer.service@tricklestar.com](mailto:customer.service@tricklestar.com)  
Toll Free: 1-888-700-1098

## Instruction Videos

If you want to see the Installation Instructions as videos, visit our YouTube channel:

<https://www.youtube.com/user/TrickleStarUS/>



## Overview

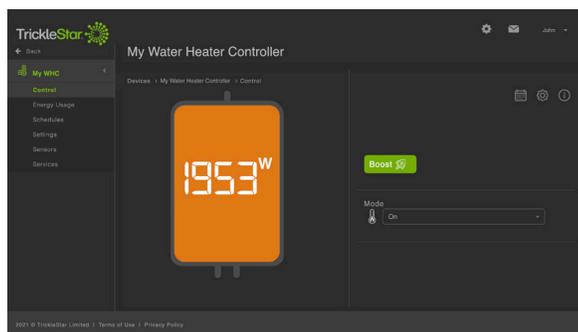
### What's in the System?

Congratulations on the purchase of your new TrickleStar Wi-Fi Electric Water Heater Controller. This Water Heater Controller offers a wide range of options to monitor and control your water heater, via:

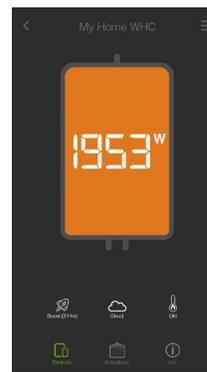
- the Water Heater Controller
- the TrickleStar Portal (Portal), which is also mobile browser friendly
- the TrickleStar App (App) on your smartphone.



Water Heater Controller



Portal / Portal Mobile



App

This User Manual will guide you through the Water Heater Controller features using the Water Heater Controller, Portal and App. You can check the list of features and the location from which to perform the features by referring to “Feature List” from pages [41](#) to [44](#).

*Note: If you have not installed your Water Heater Controller, refer to the [Installation Guide](#).*

## Water Heater Controller User Interfaces

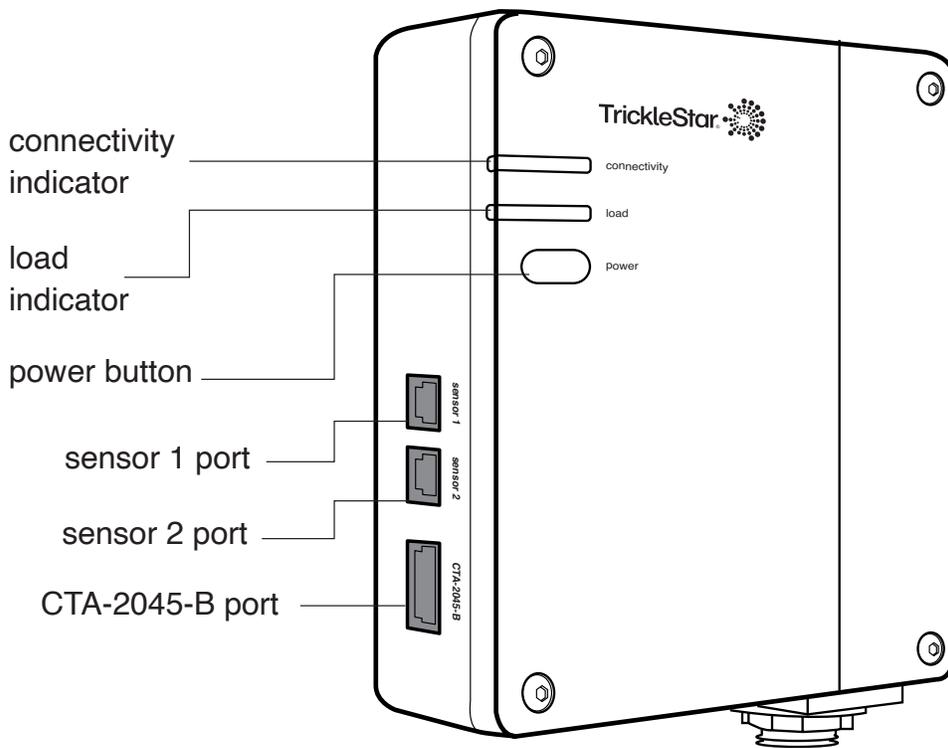


Fig 5-A



## Using the Water Heater Controller

The Water Heater Controller comes with a minimalist design. It only has two LED indicators and a power button on the front panel, with two sensor ports and a CTA-2045-B port on the side panel. As such, you need to use the TrickleStar Portal or TrickleStar App to perform the features. You can check the list of features which the Water Heater Controller can perform by referring to “Feature List” from pages [41](#) to [44](#).

However, you can check the LED indicators to obtain information on the Water Heater Controller. You can also use the power button to manually turn on or off your water heater.

This device contains the following modules:

FCC ID: VPYLB1LD

IC: 772C-LB1LD

This device complies with part 15 of FCC Rules and Industry Canada’s license-exempt RSSs. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme à la partie 15 des règles de la FCC et aux normes des CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### FCC CAUTION

Changes or modifications not expressly approved by TrickleStar could void the user’s authority to operate the equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

## Understanding the LED Indicators and Power Button

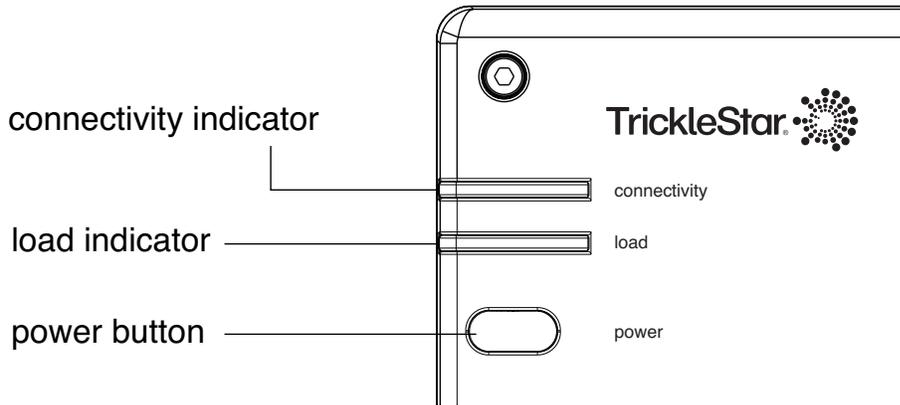


Fig 7-A

The LED indicators provide the following information:

Indicators	Status	Information
connectivity	Does not light up	There is no power to the Water Heater Controller.
	Lights up in green	The Water Heater Controller is connected to Wi-Fi but there is no demand response activity.
	Lights up in blue	The Water Heater Controller is connected to Wi-Fi and there is demand response activity.
	Flashes in green	The Water Heater Controller has not been connected to Wi-Fi via the Portal or there is a connectivity error.
load	Does not light up	The load is off; there is no power to your water heater.
	Lights up in red	The load is on; power is supplied to your water heater.
	Flashes in red	An error has been detected, and the load is off as a protective measure.

**If you do not have access to the Portal or App but you want to turn on your water heater:**  
Press the power button to turn on or off the water heater manually.

## Using the Portal

The Portal supports the entire set of features, other than those requiring manual setting on the Water Heater Controller. You can follow the step-by-step instructions on the Portal easily. You can also check the list of features which the Portal can perform by referring to “Feature List” from pages [41](#) to [44](#).

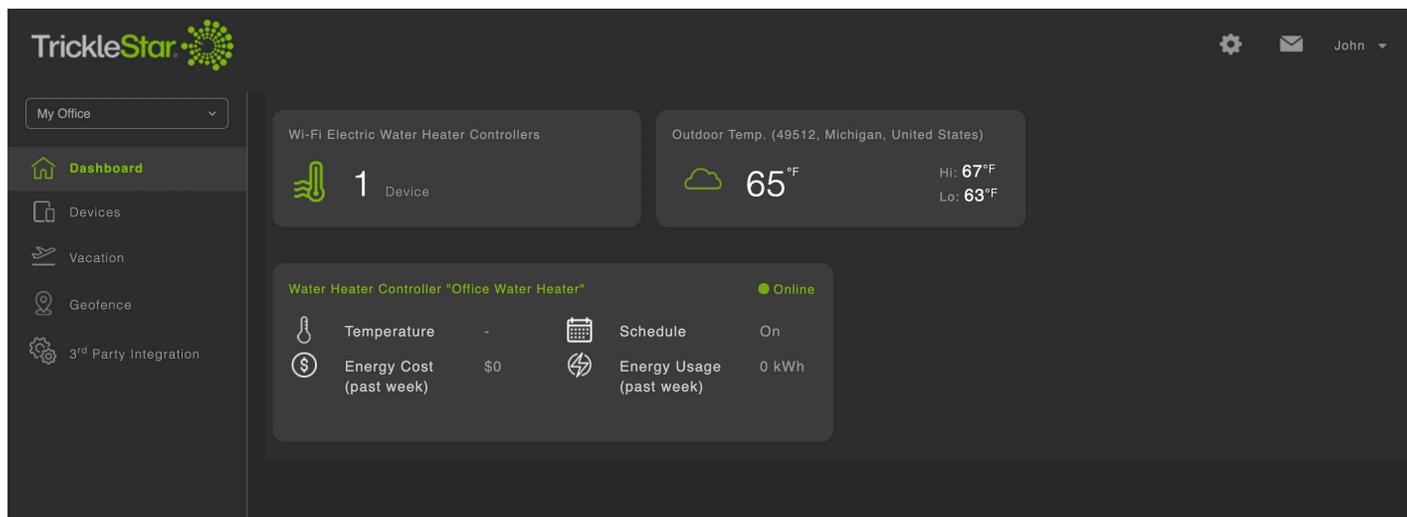


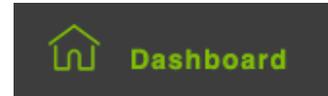
Fig 8-A

**Note:**

- If you have not created a Portal account, create one at: [portal.tricklestar.com](https://portal.tricklestar.com)
- TrickleStar Portal is also mobile browser friendly, so you may visit the Portal using the browser in your smartphone.

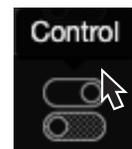
## Understanding the Icons

The TrickleStar Portal is designed to be intuitive and easy-to-use. Most of the icons, buttons and interfaces have their functions clearly labelled on the button itself.



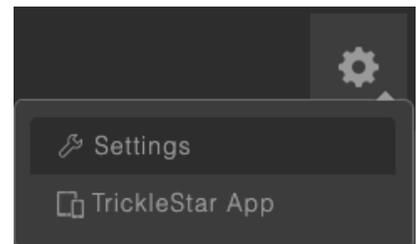
For example: The Dashboard icon is labelled as such.

Where the icons are not labelled from the get-go, you may mouse over those icons, and the label will be shown automatically.



For example: Mouse over the Control icon, the label will be shown.

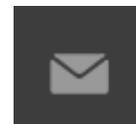
Some icons act as a dropdown menu when clicked. As such, they do not have their labels shown from the get-go or when moused over.



For example: Click on the Settings icon to see the dropdown menu.

The Messages icon stores all messages prompted by the Portal, the App, or utilities (for DR and ToU integrations).

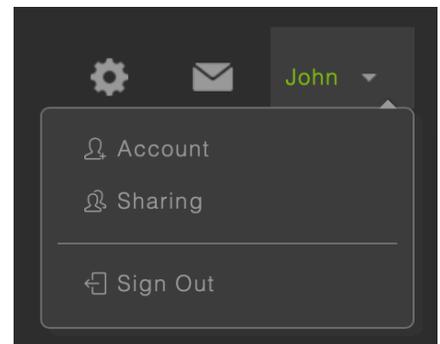
For example: Click on the Messages icon to see all messages.



Your Portal account name is shown at the top right corner of the Portal. Clicking on the name will reveal a dropdown menu showing the "Account", "Sharing" and "Sign Out" icons.

For example:

You can change your Account Settings in the "Account" icon. Clicking on the "Sharing" icon takes you to the Site Management and Sharing page, where you can manage your sites as well as your delegation and ownership transfer requests.



Click on the "Sign Out" icon if you want to sign out from your Portal account.

### Note:

- Some advanced device settings may have a tooltip explaining the settings in more detail. Simply mouse over the tooltip icon  to read the settings explanation.
- Please allow for a few seconds for the tooltip explanation to be shown when mousing over the tooltip icon.

## Using the Icons on the Left Column

You can select the icons on the left column to perform specific tasks as follows:

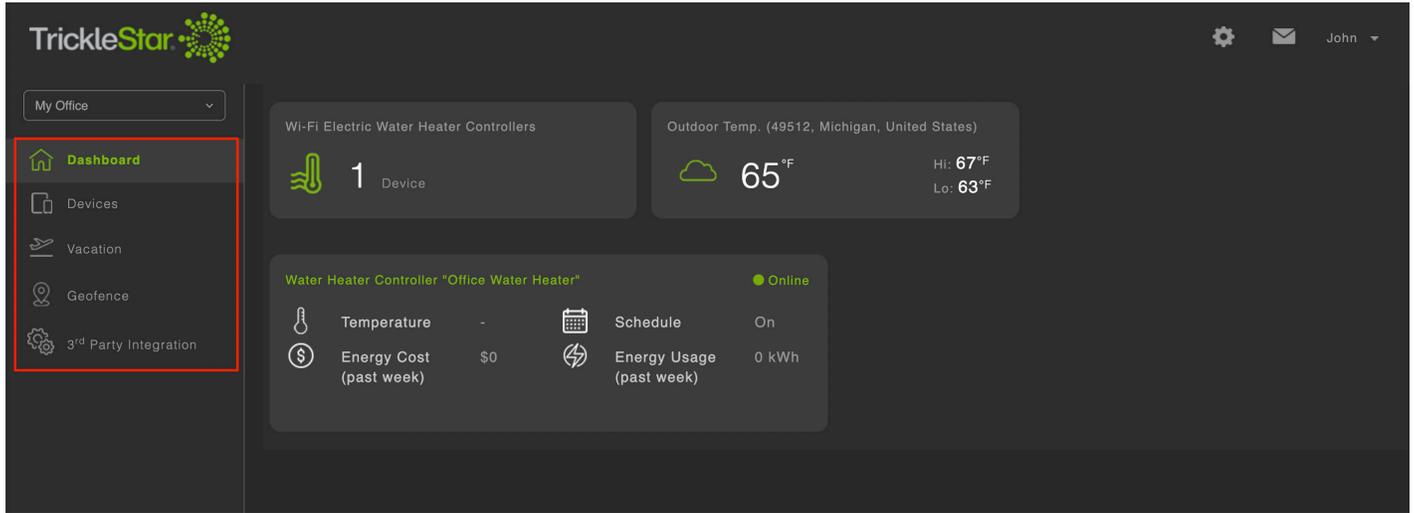


Fig 10-A

Select this Icon	To
 <b>Dashboard</b>	Show the basic settings for your connected devices and to change the settings.
 Devices	Show your connected devices so that you can select and change the settings for the device.
 Vacation	Update your vacation details and to enable/disable the vacation schedule for your connected devices.
 Geofence	Define the boundary of your geofence. Only available for the TrickleStar Smart Thermostat.
 3 <sup>rd</sup> Party Integration	Integrate with Amazon Alexa or Google Home.

## On the Dashboard Page (Home Page)

1. Select “Dashboard” to show the basic settings for your connected devices.
2. Click on the device to access the Device control page where the settings can be changed.

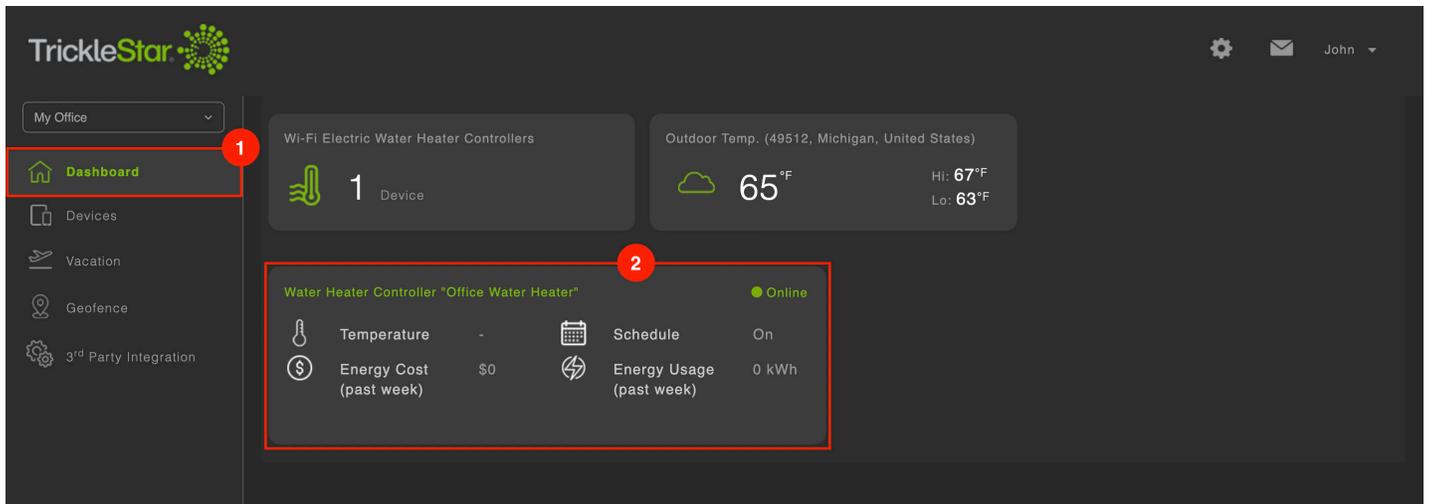


Fig 11-A

## On the Devices Page

1. Select “Devices” to show your connected devices.
2. Click on the device name to change its settings.
3. Switch on or off your water heater by clicking on the “On/Off” slider button. You may also click on the icons from the available actions.
4. Delete device(s) by checking the checkbox in front of the device and click "Delete". You may delete more than 1 device at a time.
5. Click “Add New +” to add a new device to your TrickleStar account.

The screenshot shows the TrickleStar web interface. The left sidebar contains navigation options: Dashboard, **Devices** (highlighted with a red box and callout 1), Vacation, Geofence, and 3<sup>rd</sup> Party Integration. The main content area is titled "Devices" and shows a summary for "Wi-Fi Electric Water Heater Controllers" with "1 Device". A weather widget displays "Outdoor Temp. (49512, Michigan, United States)" at "50°F" with a high of 54°F and a low of 46°F. Below this is a table of devices:

Device Name	Device Type	DSN / MAC	Location	Status	On/Off	Actions
<b>Office Water Heater</b> (highlighted with callout 2)	Wi-Fi Electric Water Heater Controller	AC000W008520353	My Office	Online	<input type="checkbox"/> On (highlighted with callout 3)	[Icons: Delete, Refresh, Calendar, Settings] (highlighted with callout 3)

At the top right of the device list, there are "Delete" (callout 4) and "Add New +" (callout 5) buttons. The bottom of the table shows "Showing 1 to 1 of 1 records" and a pagination control with "1" selected.

Fig 12-A

## Adding a new Water Heater Controller

1. At the “Devices” page, click “Add New +” to add a new Water Heater Controller.

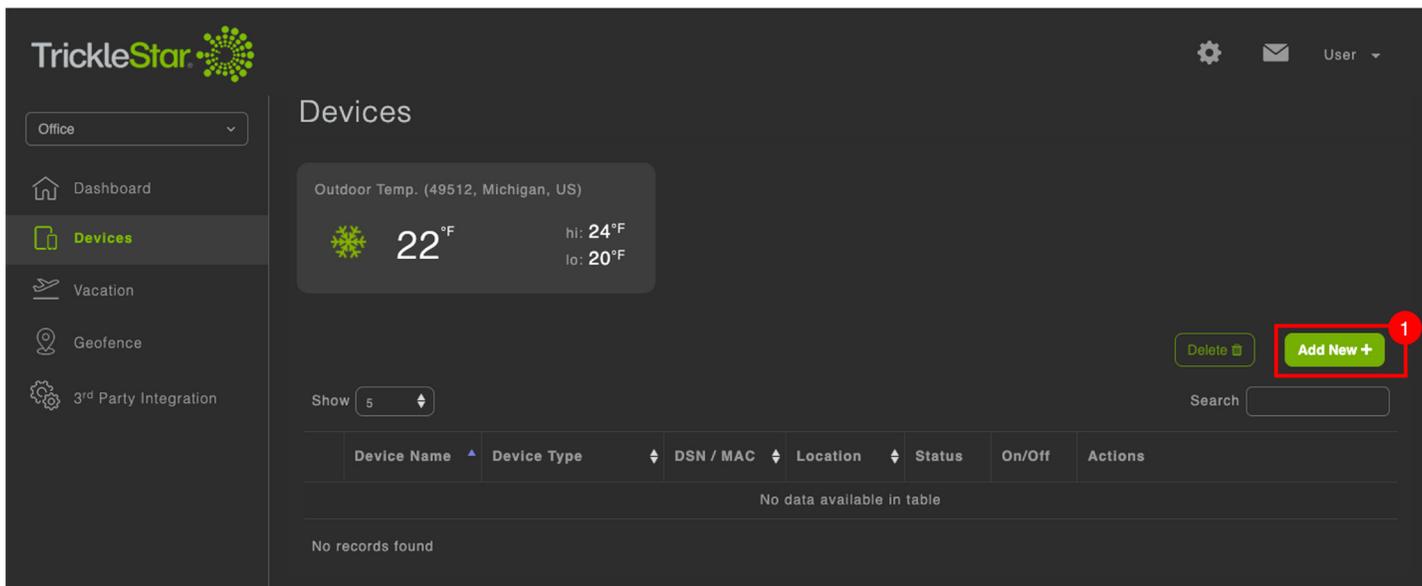


Fig 13-A

2. Select “Wi-Fi Electric Water Heater Controller”.

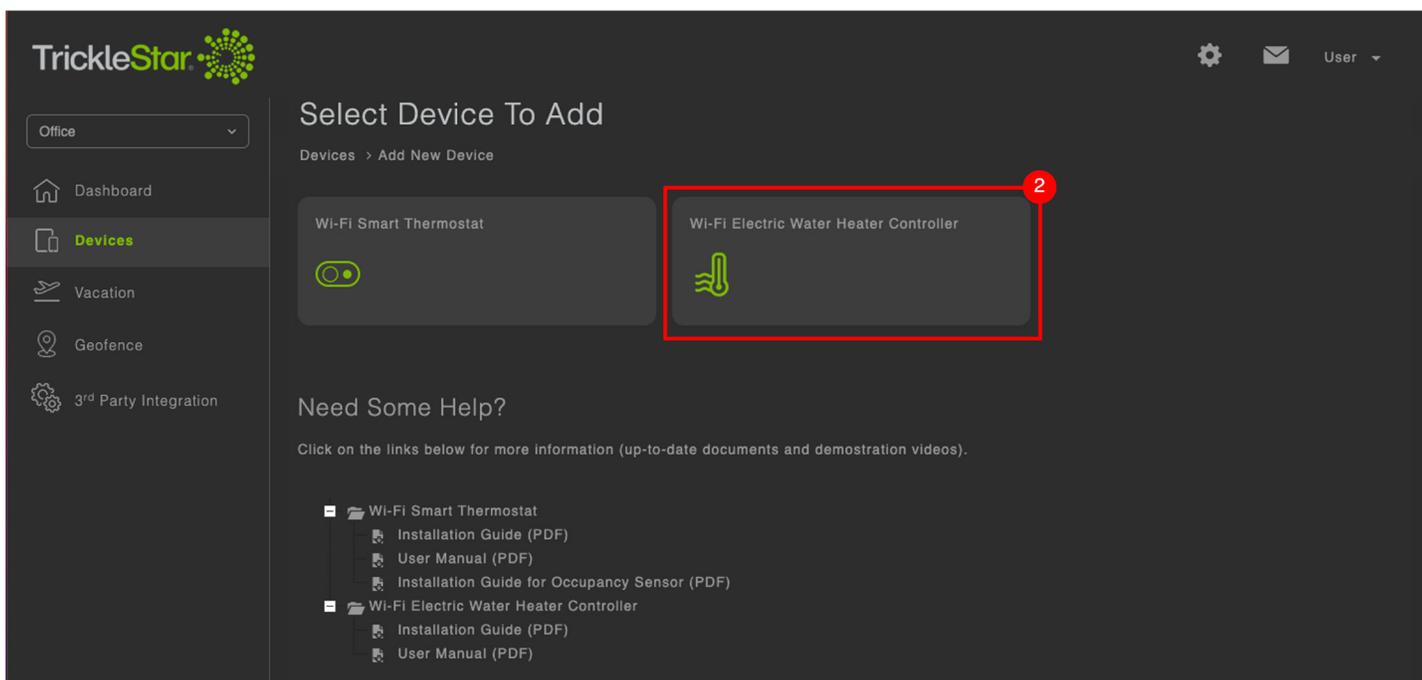


Fig 13-B

3. Select an existing site or create a new site and enter the Site Name. Then, click “Next”.

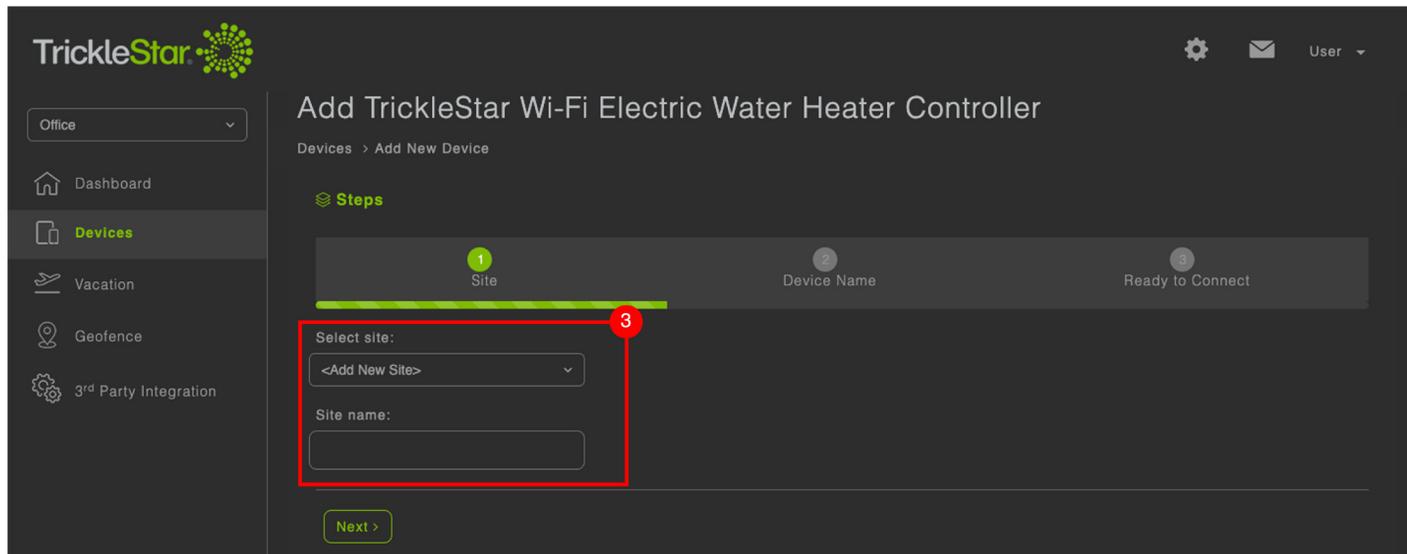


Fig 14-A

4. Create a name for the Water Heater Controller that you are adding. Choose a short name that is easy to pronounce, and avoid cryptic names like WHC-01. Then, click “Next”.

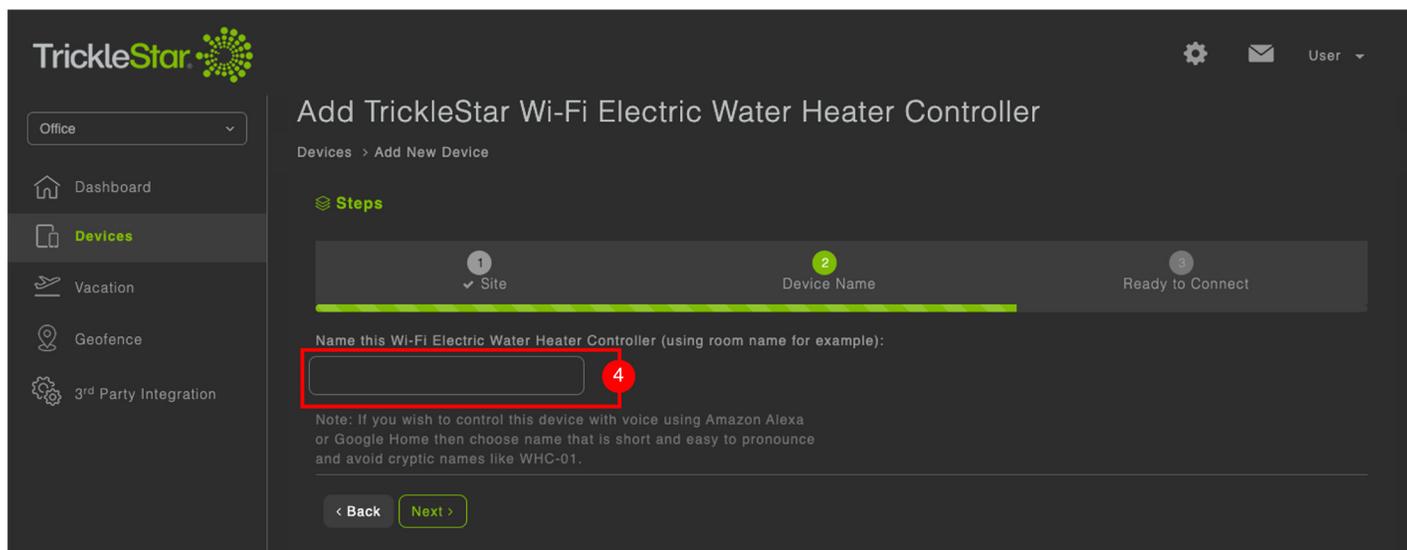


Fig 14-B

5. Turn on the Water Heater Controller. Confirm that the “connectivity” indicator on the Water Heater Controller is blinking, and click “Connectivity LED blinking”.  
If the “connectivity” indicator is not blinking, press and hold the power button on the Water Heater Controller for 15 seconds. Release the button when the indicator starts blinking blue/green. Then, click “Connectivity LED blinking”.

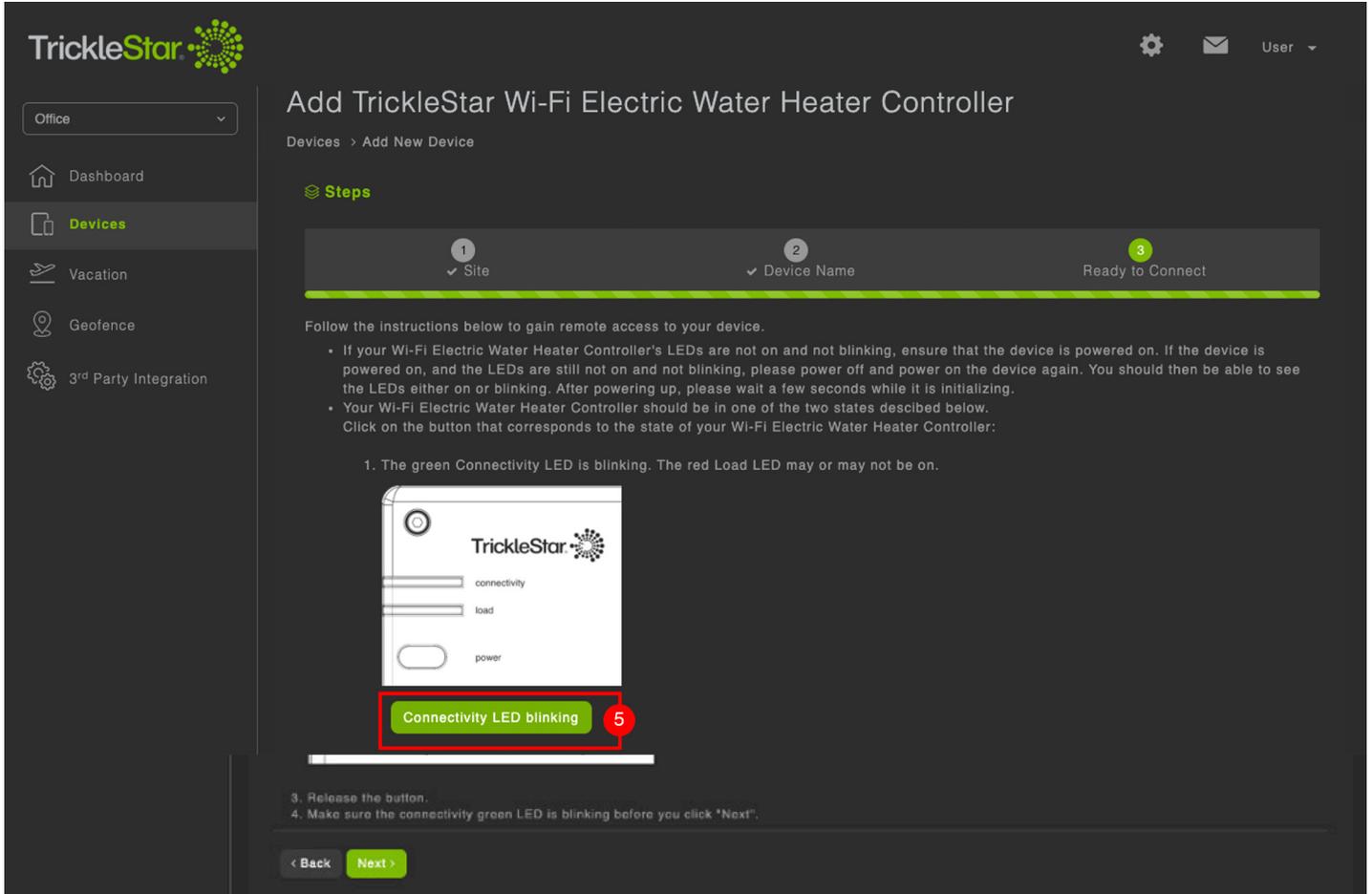


Fig 15-A

6. Enter the DSN (in all caps) of the Water Heater Controller. The DSN can be found on the sticker on the back of the device, and should look like this: AC000W987654321. Then, click “Next”.

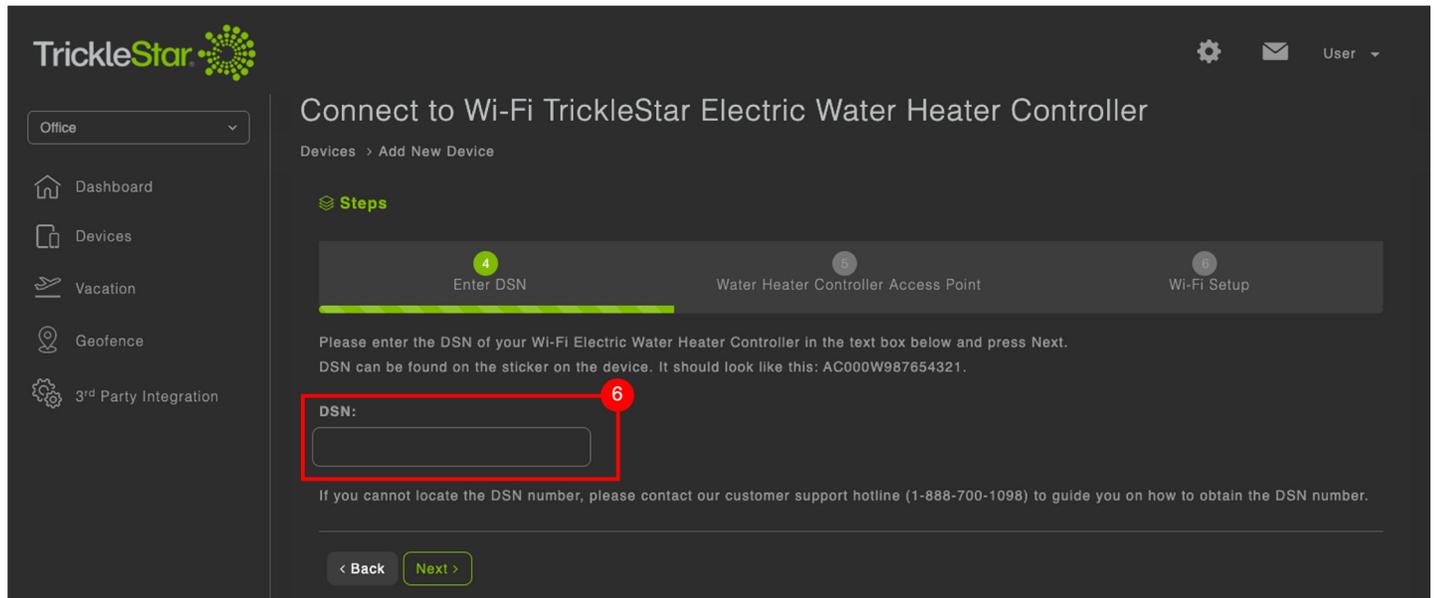
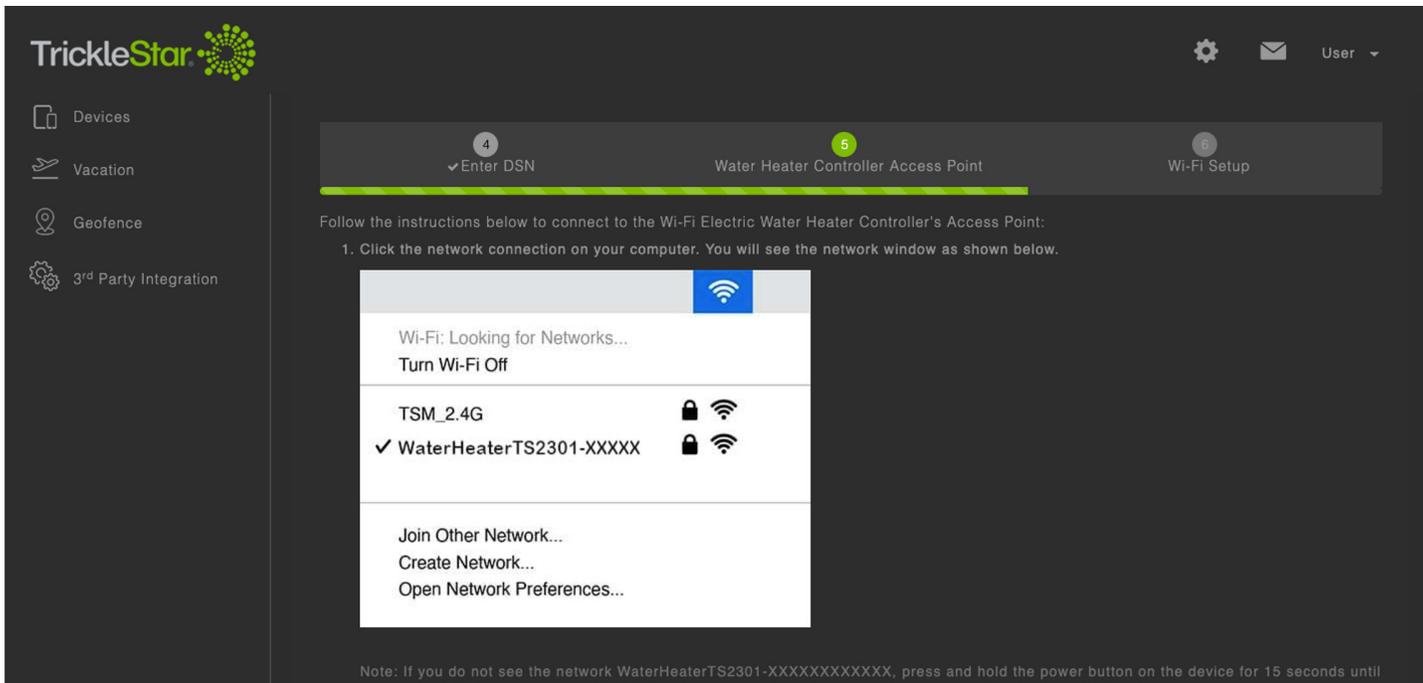


Fig 16-A

7. Click the Wi-Fi network connection icon on your computer. You will see the Water Heater Controller in Access Point mode, which is identified as “WaterHeaterTS2301-XXXXXXXXXXXX” where X is the 12-digit MAC address.

Select the Water Heater Controller that you are adding based on the MAC address. Then, click “Next”.



TrickleStar 

4 Enter DSN 5 Water Heater Controller Access Point 6 Wi-Fi Setup

Follow the instructions below to connect to the Wi-Fi Electric Water Heater Controller's Access Point:

1. Click the network connection on your computer. You will see the network window as shown below.

Wi-Fi: Looking for Networks...  
Turn Wi-Fi Off

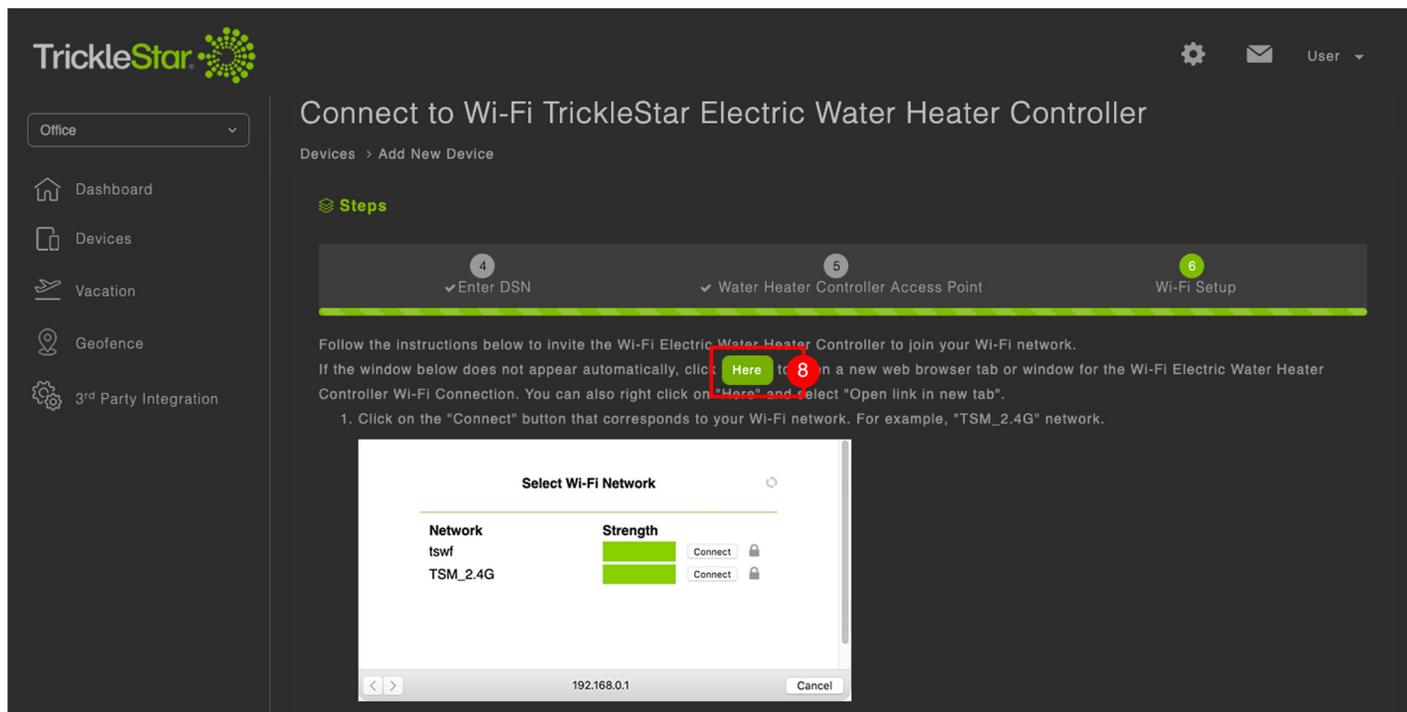
TSM\_2.4G    
✓ WaterHeaterTS2301-XXXXX  

Join Other Network...  
Create Network...  
Open Network Preferences...

Note: If you do not see the network WaterHeaterTS2301-XXXXXXXXXXXX, press and hold the power button on the device for 15 seconds until

Fig 17-A

8. Follow the instructions to connect the Water Heater Controller to your preferred Wi-Fi network. If the available Wi-Fi networks window is not displayed automatically, click on the button labelled “Here” to open a web browser tab for the connection window.



The screenshot shows the TrickleStar web interface for connecting a Water Heater Controller to Wi-Fi. The main heading is "Connect to Wi-Fi TrickleStar Electric Water Heater Controller". Below this, there are three steps: 4. Enter DSN, 5. Water Heater Controller Access Point, and 6. Wi-Fi Setup. The current step is 6. A "Here" button is highlighted with a red circle and the number 8. Below the steps, there is a text block with instructions: "Follow the instructions below to invite the Wi-Fi Electric Water Heater Controller to join your Wi-Fi network. If the window below does not appear automatically, click on the 'Here' button to open a new web browser tab or window for the Wi-Fi Electric Water Heater Controller Wi-Fi Connection. You can also right click on 'Here' and select 'Open link in new tab'." Below this text is a "Select Wi-Fi Network" dialog box with a table of available networks:

Network	Strength	Connect
tswf	<div style="width: 50%; background-color: #808080;"></div>	Connect
TSM_2.4G	<div style="width: 100%; background-color: #008000;"></div>	Connect

The dialog box also shows navigation arrows, the IP address 192.168.0.1, and a Cancel button.

Fig 18-A

9. If the Wi-Fi provisioning is successful, the “connectivity” indicator on the Water Heater Controller will light up continuously.
10. After connecting the Water Heater Controller to your Wi-Fi network, connect your computer to the same Wi-Fi network that you selected for the Water Heater Controller. Then, click “Done” at the bottom of the page to complete the registration.

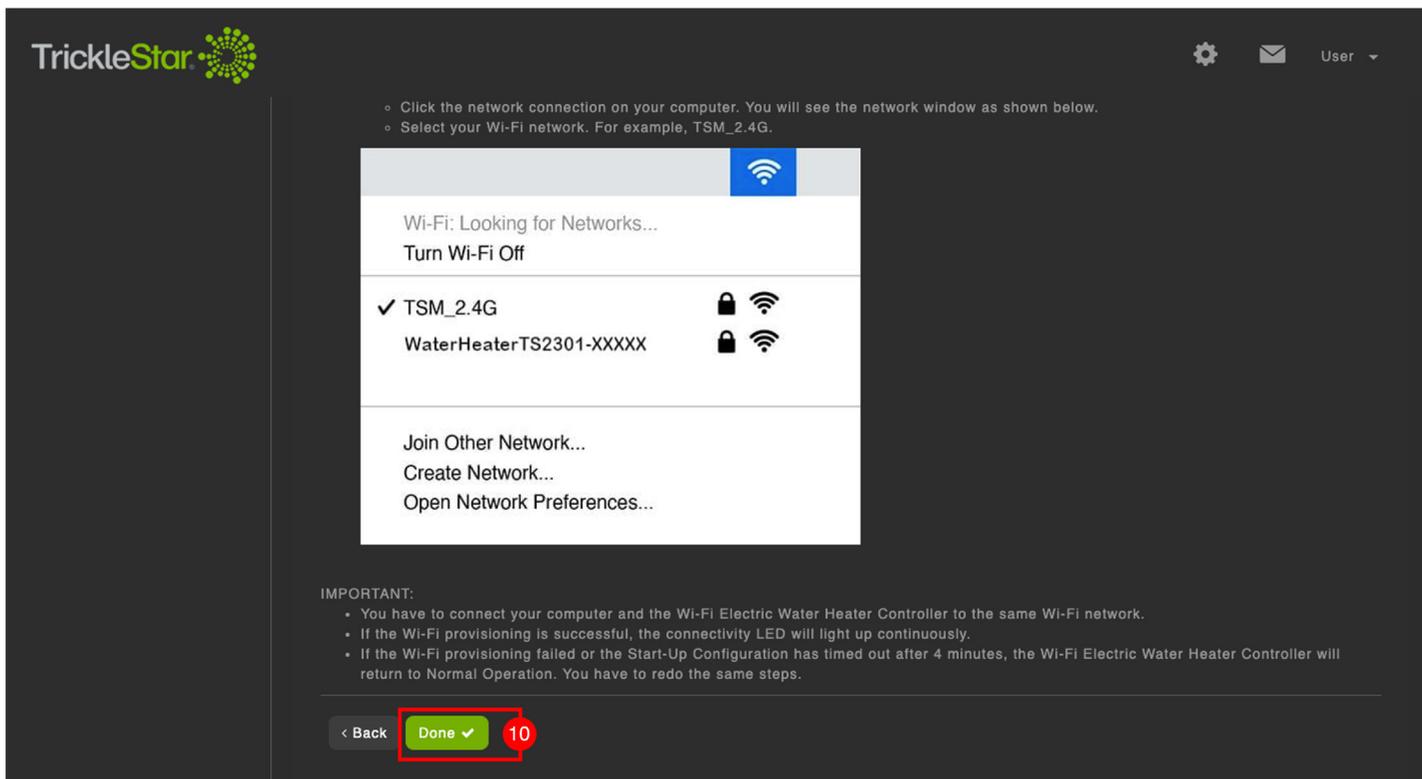


Fig 19-A

10. You can find the DSN at the back of the Water Heater Controller, or at the side of the packaging box. Enter the DSN in the column provided, and click “Done”.

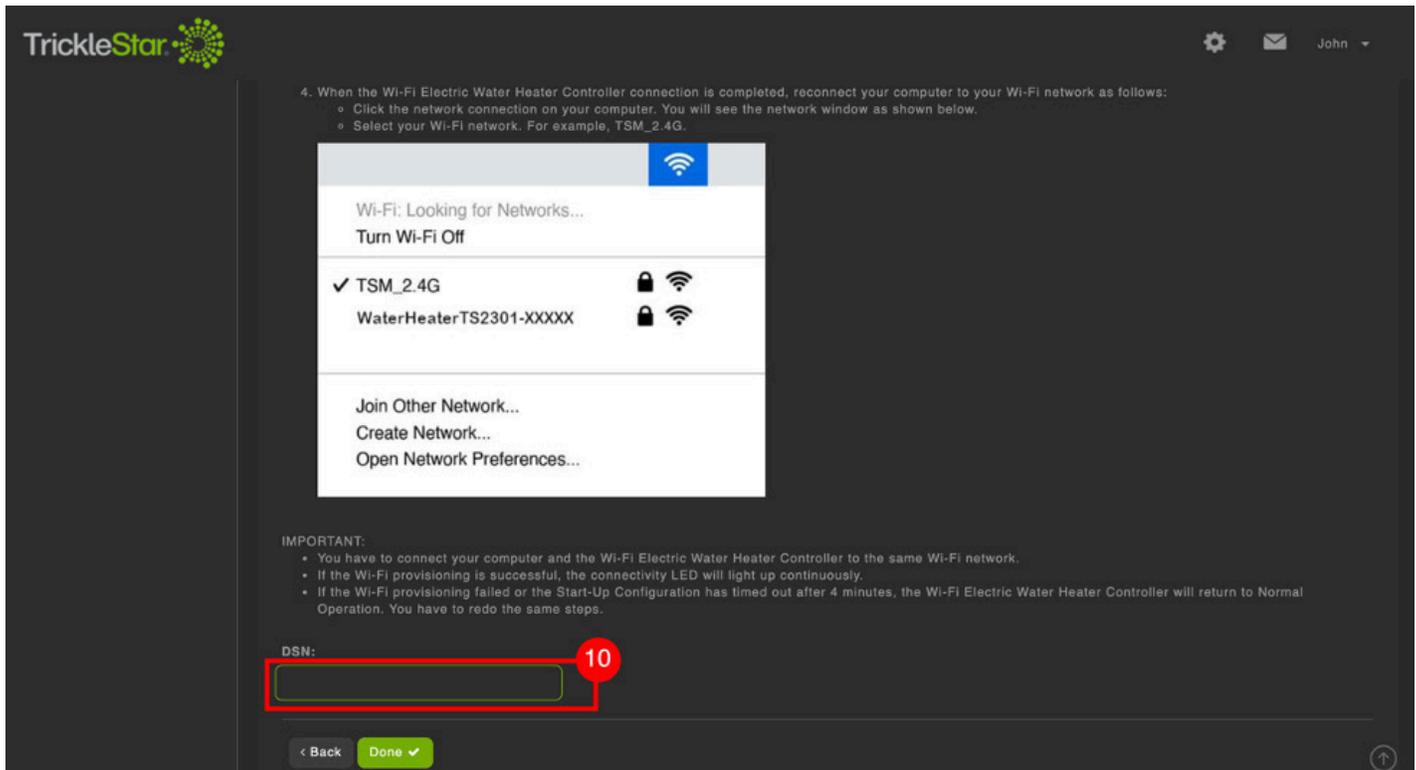


Fig 20-A

## On the Control Page

1. Clicking on the Device Name in the Devices page will bring you to this page. Select the category to access the different functions as shown in the table that follows.

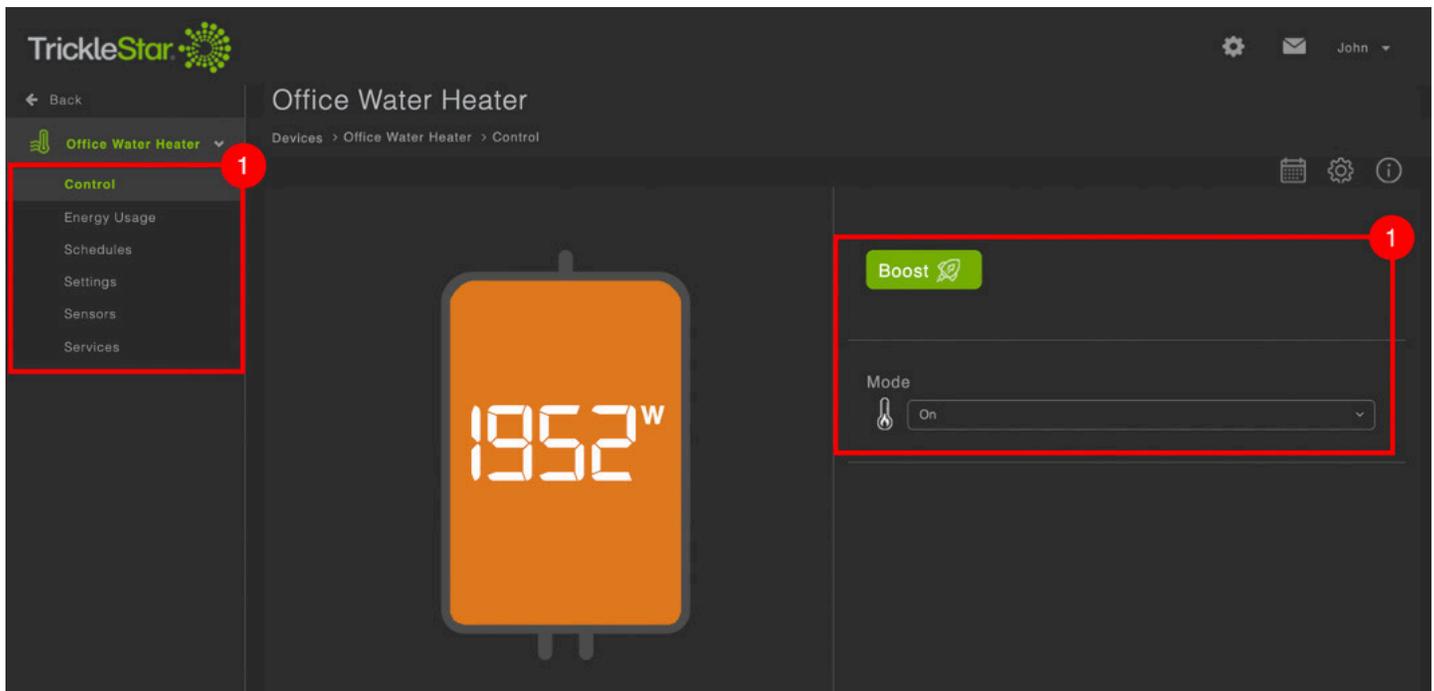


Fig 21-A

Select	To
Control	Control the water heater in real time.
Energy Usage	Check the energy usage and energy cost for a specific period.
Schedules	Show your daily/weekly schedule and to add/edit/delete a scheduled event.
Settings	Change the Safety Minimum Low Temperature Setpoint, enable/disable Boost and Boost duration settings.
Sensors	Show information of the connected sensors.
Services	Change the settings for Alerts and Reminders.
Mode	Turn on/off the water heater.
Boost	Turn on the water heater for a specific duration. When Boost is activated, schedules will not be executed.

## On the Energy Usage Page

1. Click on the dropdown arrow to select the energy usage period to view the collected data. The available options are Past week, Month-to-date and Year-to-date.

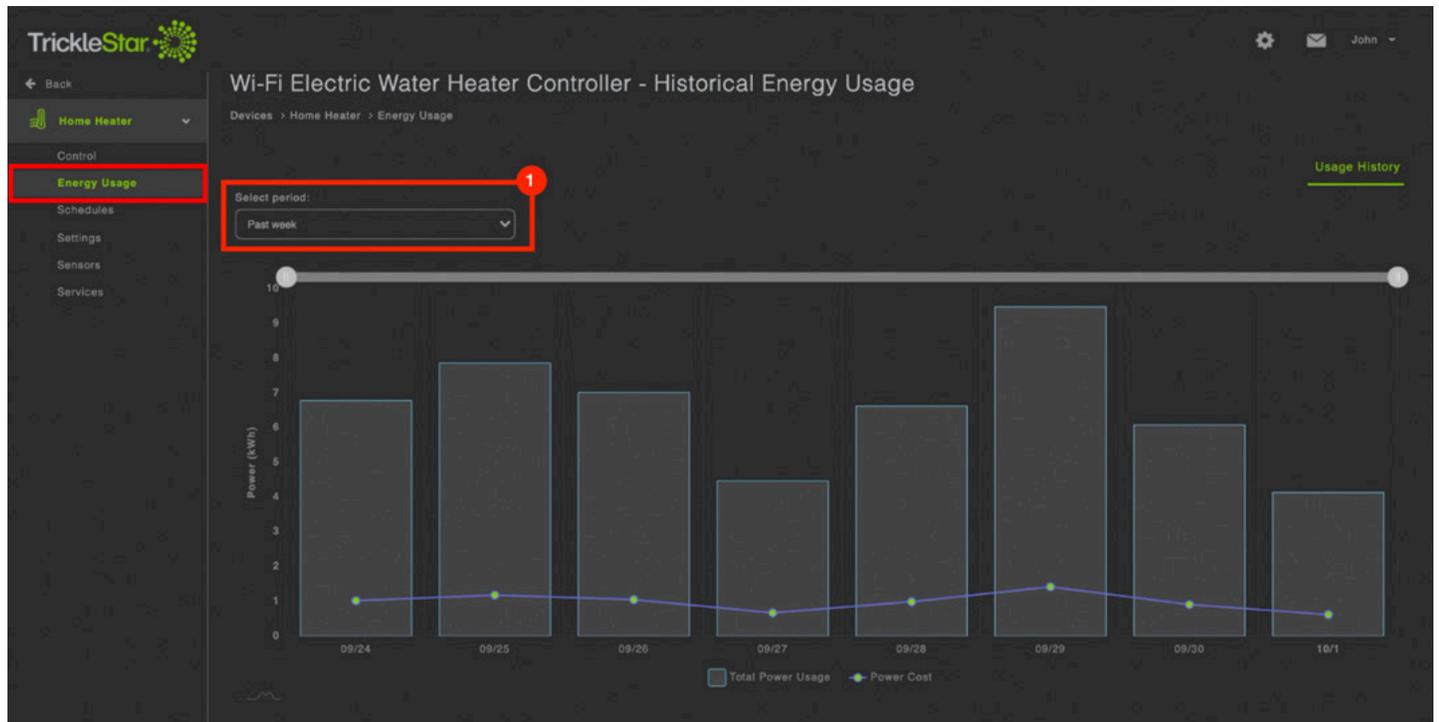


Fig 23-A

## On the Schedules Page

1. Click on  to add a new schedule or load the default schedule. You will need to specify the schedule's applicable day(s), time, and water heater mode – on or off.
2. You may also click on any existing schedule to edit or delete it.

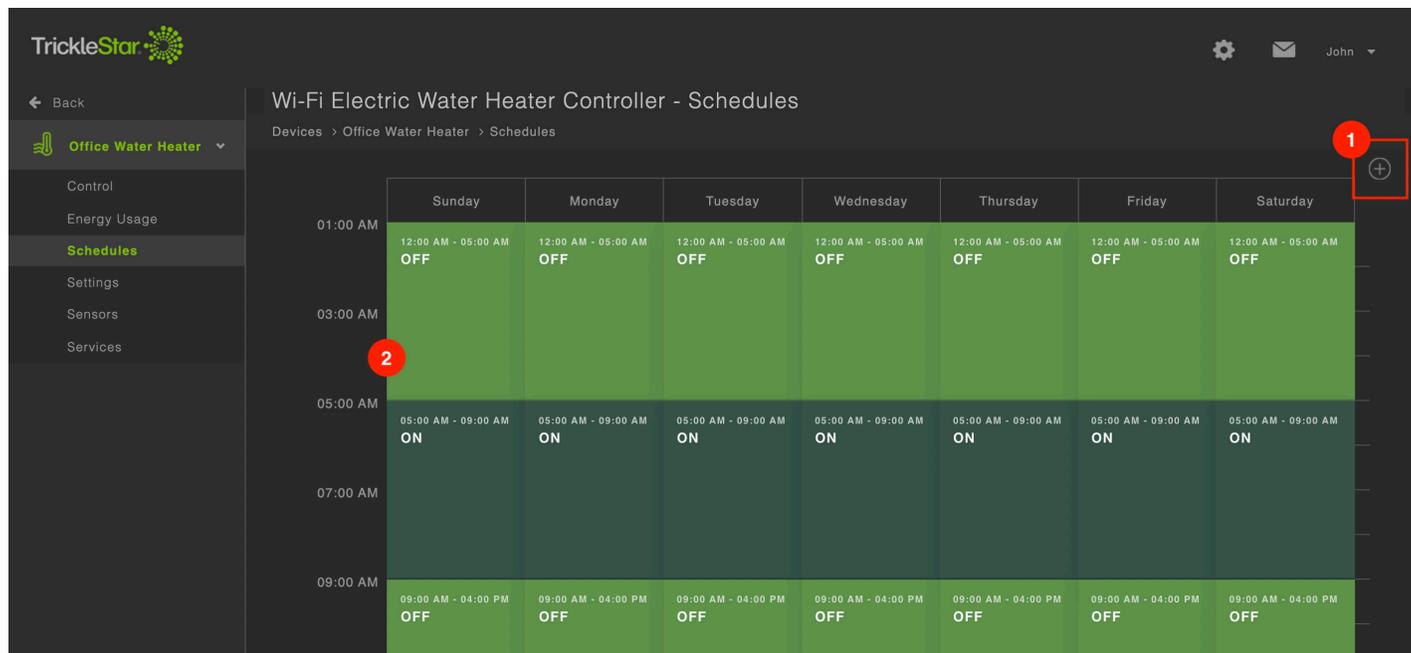


Fig 24-A

## On the Settings Page

1. Set the safety minimum temperature setpoint to turn on the water heater. If the measured temperature falls to or goes below this setpoint, the water heater will automatically turn on and the TrickleStar App will prompt a notification to the smartphone. The water heater will remain on until the measured temperature rises above this setpoint. All schedule or manual override using the Portal/App/Power button is not allowed.
2. Enable or disable the Boost function on the Water Heater Controller and set the duration for it. If enabled, Boost can be activated from the Portal or App's control page. When Boost is activated, no schedule will be executed throughout the boost duration. However, manual override using the Portal/App/Power button is allowed.

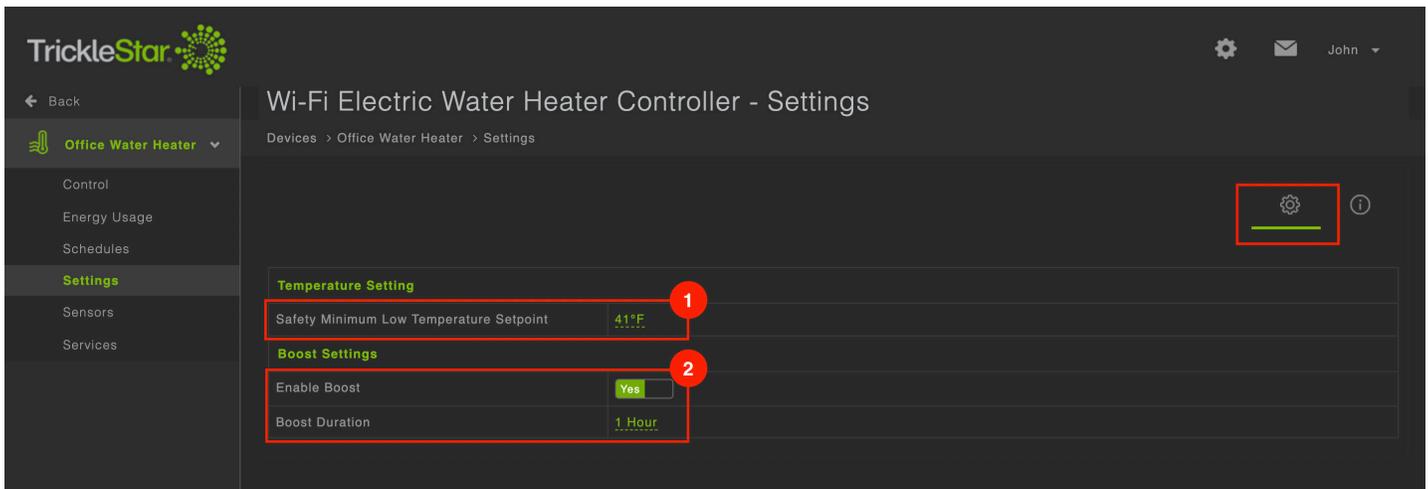
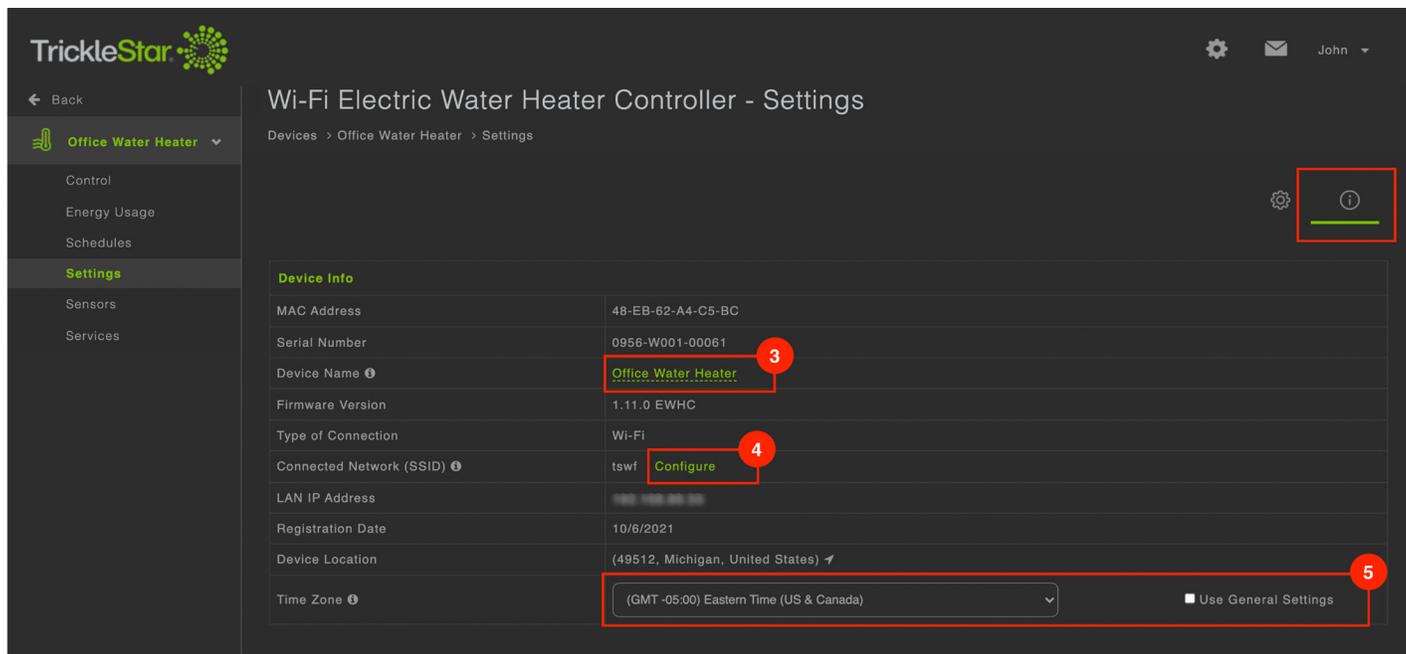


Fig 25-A

3. Rename your Water Heater Controller here.
4. Click to re-configure your Wi-Fi network if the Wi-Fi password has been changed or if you want to connect the Water Heater Controller to another Wi-Fi network.
5. Set the time zone of your Water Heater Controller. You can also use the time zone specified in General Settings by checking the “Use General Settings” checkbox.



TrickleStar  John

← Back **Office Water Heater** ▼

Control  
Energy Usage  
Schedules  
**Settings**  
Sensors  
Services

### Wi-Fi Electric Water Heater Controller - Settings

Devices > Office Water Heater > Settings

Device Info	
MAC Address	48-EB-62-A4-C5-BC
Serial Number	0956-W001-00061
Device Name ⓘ	Office Water Heater <b>3</b>
Firmware Version	1.11.0 EWHC
Type of Connection	Wi-Fi
Connected Network (SSID) ⓘ	tswf <b>4</b> <a href="#">Configure</a>
LAN IP Address	192.168.0.10
Registration Date	10/6/2021
Device Location	(49512, Michigan, United States) ↕
Time Zone ⓘ	(GMT -05:00) Eastern Time (US & Canada) <b>5</b> <input type="checkbox"/> Use General Settings

Fig 26-A

## On the Sensors Page

1. Check the status of the temperature sensor and flood sensor. The temperature sensor displays the actual temperature measured at the water heater's water inlet. The flood sensor shows if there is water leak detected. If water leak is detected, the water heater will automatically turn off and water leak icon will be displayed on the Portal and App's Control page. The TrickleStar App will also prompt a notification of the water leak to the smartphone.

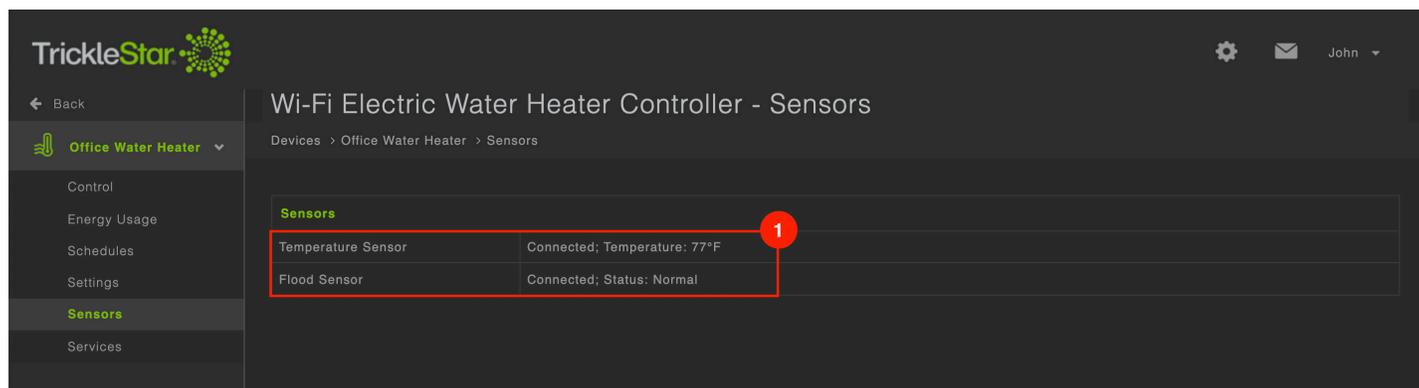


Fig 27-A

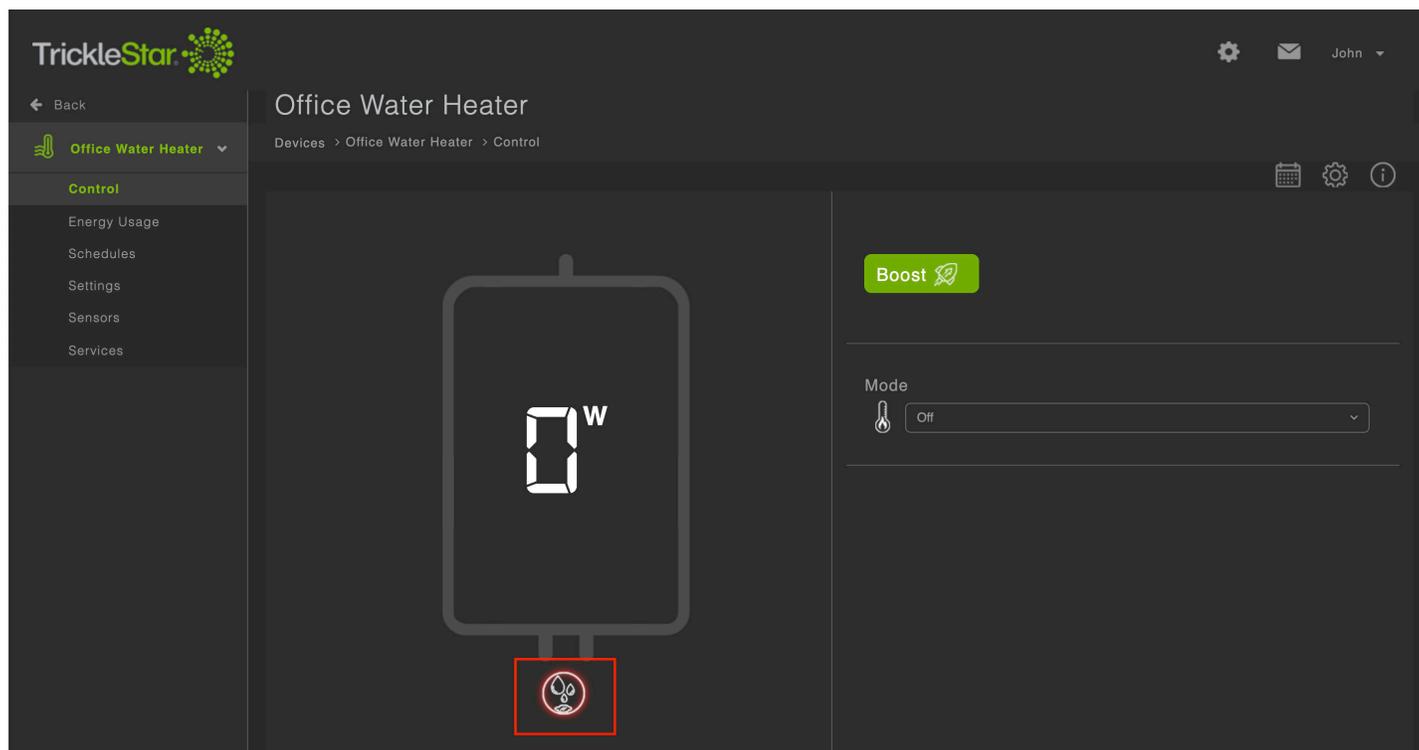


Fig 27-B

## On the Services Page

1. Set the temperature setpoint for low temperature alert. The TrickleStar App will prompt a notification to the smartphone if the measured temperature falls below this setpoint. You can select a separate value or use the same temperature setpoint as the safety minimum temperature setpoint specified in the Water Heater Controller settings page.

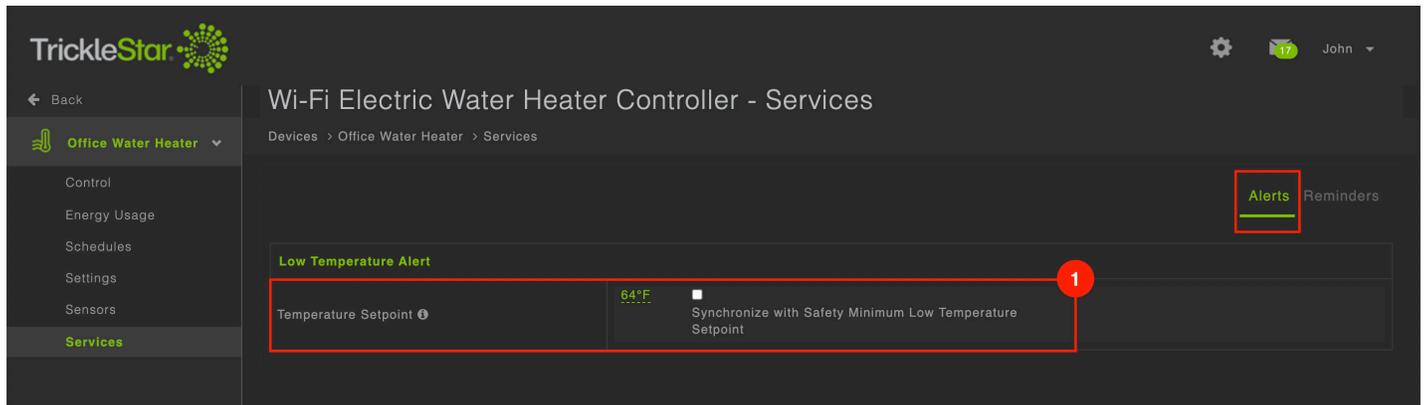


Fig 28-A

2. Set a maintenance reminder to check on your water heater system. Select the duration accordingly and the TrickleStar App will prompt a notification to the smartphone on the date shown in brackets.

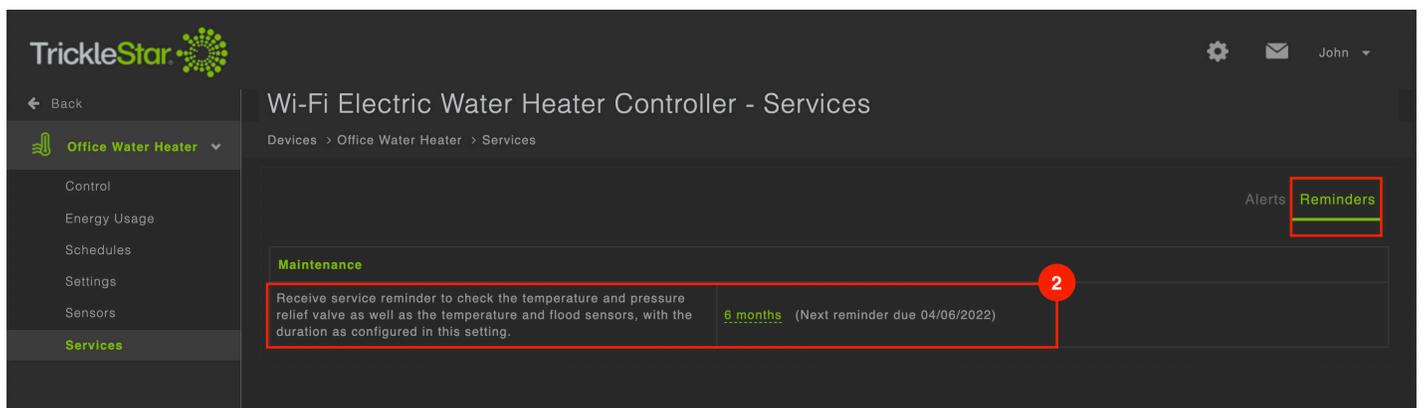
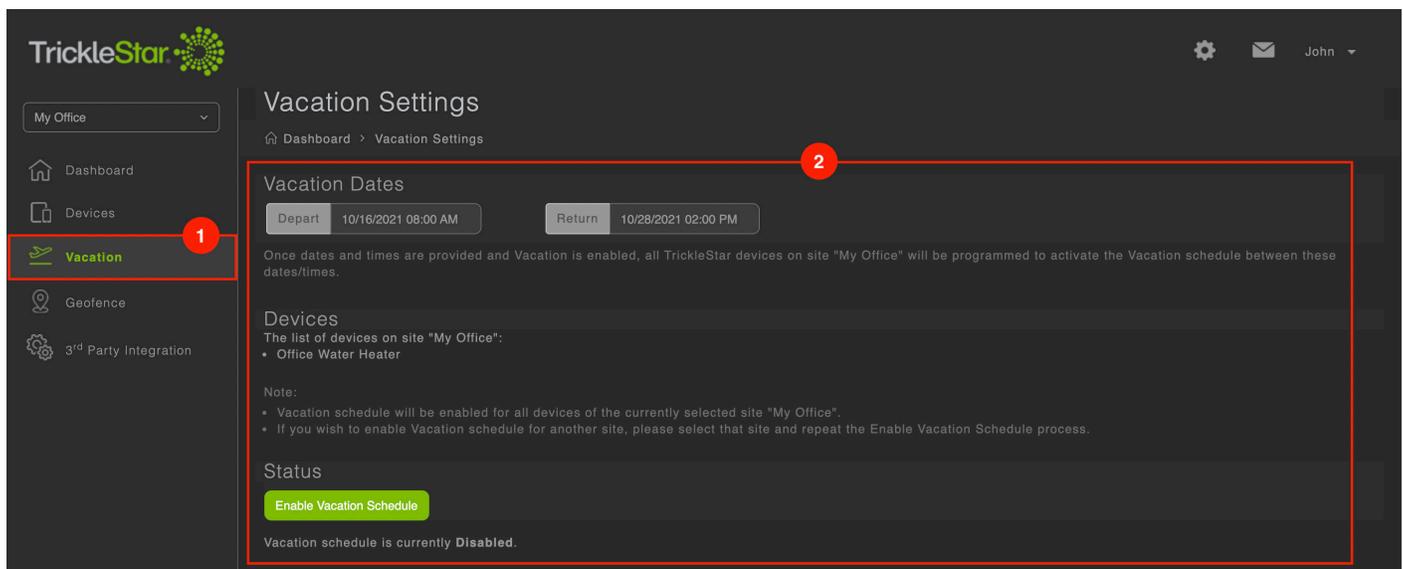


Fig 28-B

## On the Vacation Page

1. Select “Vacation” to update your vacation schedule for your connected devices.
2. Update your vacation details and enable/disable the vacation schedule.



TrickleStar® 

My Office

Dashboard

Devices

**Vacation**

Geofence

3<sup>rd</sup> Party Integration

### Vacation Settings

Dashboard > Vacation Settings

#### Vacation Dates

Depart 10/16/2021 08:00 AM Return 10/28/2021 02:00 PM

Once dates and times are provided and Vacation is enabled, all TrickleStar devices on site "My Office" will be programmed to activate the Vacation schedule between these dates/times.

#### Devices

The list of devices on site "My Office":

- Office Water Heater

Note:

- Vacation schedule will be enabled for all devices of the currently selected site "My Office".
- If you wish to enable Vacation schedule for another site, please select that site and repeat the Enable Vacation Schedule process.

#### Status

[Enable Vacation Schedule](#)

Vacation schedule is currently **Disabled**.

Fig 29-A

## On the 3rd Party Integration Page

1. Select “3rd Party Integration” to integrate with Amazon Alexa or Google Home.
2. Click “Configure” accordingly to integrate with your preferred 3rd party system.

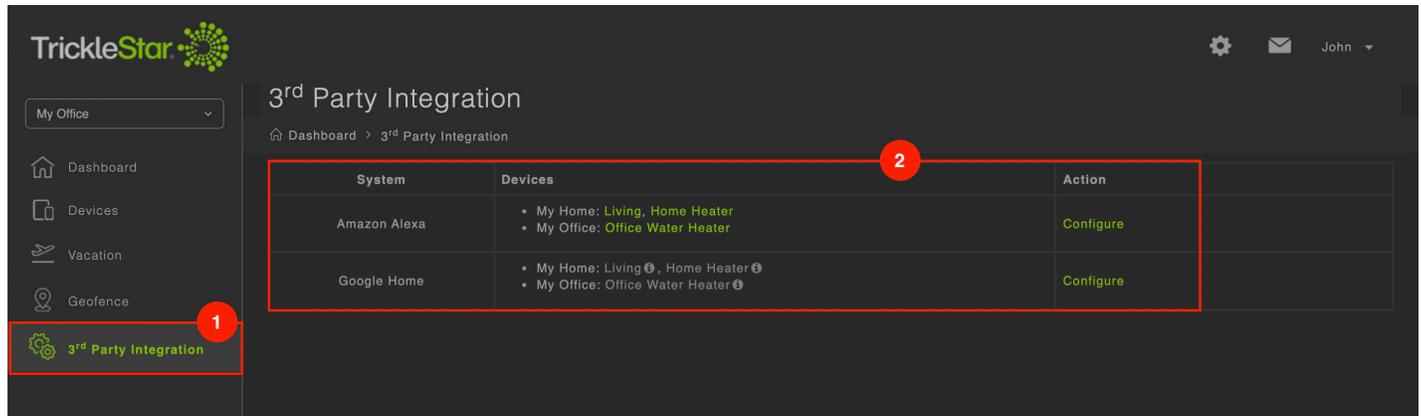


Fig 30-A

## Using the App

The App is handy when you want to check or change the Water Heater Controller settings immediately and from anywhere. You can tap on the icons, then select the setting you want easily. Check the list of features that the App can perform by referring to “Feature List” from pages [41](#) to [44](#).

Download the TrickleStar App to your smartphone from the Apple App Store or Google Play Store. You can also use the following QR Codes:

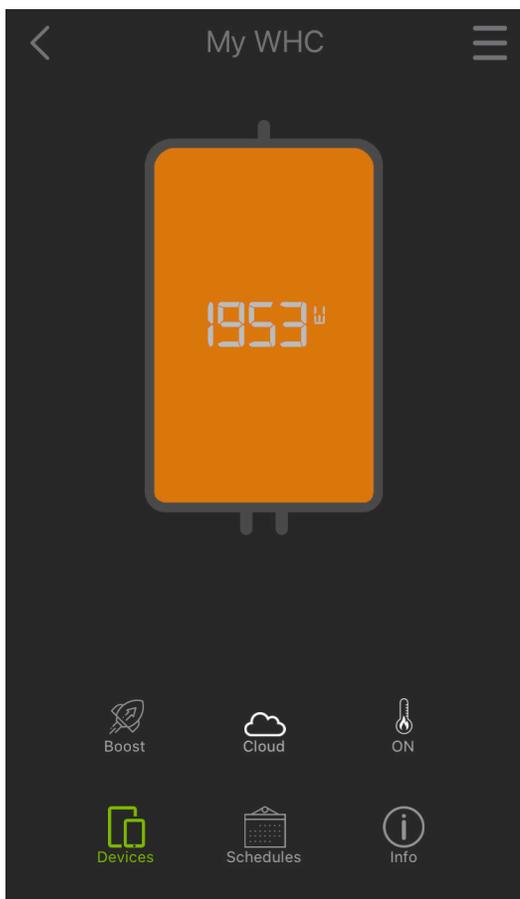


Fig 31-A



*Note: To use the App, you need to have a Portal account. If you have not created a Portal account, create one at: [portal.tricklestar.com](http://portal.tricklestar.com)*

## Using the Icons at the Bottom Row

You can tap on the icons at the bottom row to perform specific tasks as follows:

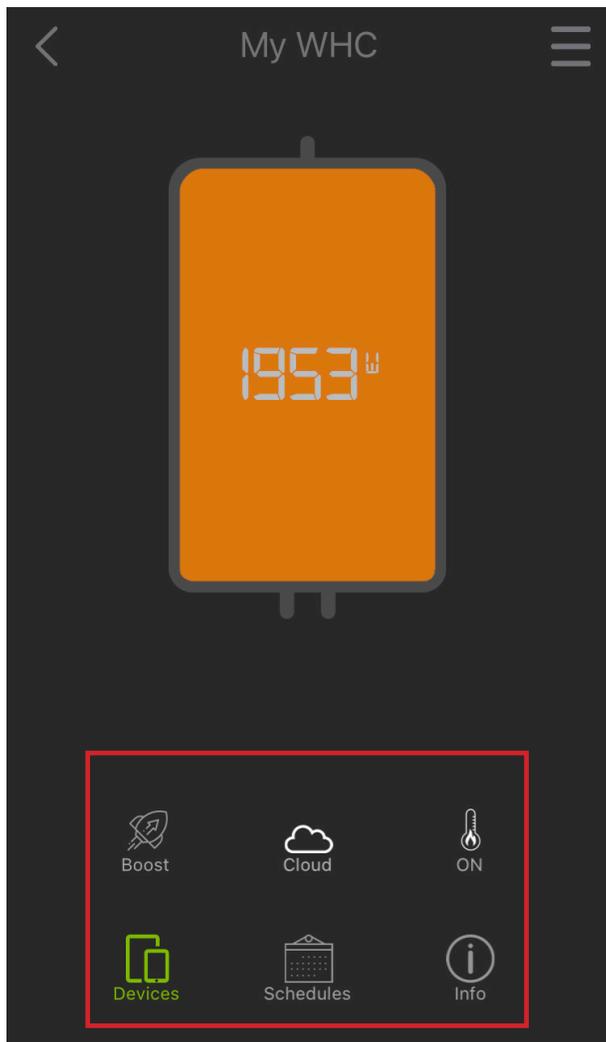
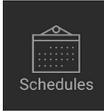
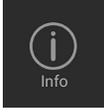
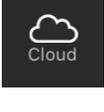


Fig 32-A

Tap on the icon	To
	Show and edit the basic settings for your selected device.
	Show and edit your daily/weekly schedule and to enable/disable your vacation schedule.
	Show the settings or information for the water heater, Device Info, Energy Usage and Services.
	Boost on with timer or Boost off.
	Indicate if the App is working at a different network (Cloud) or same network (LAN) with the Water Heater Controller.
	Turn on or off the water heater.

## Tapping on the Schedules Icon

You can tap on the “Schedules” icon to show your daily/weekly schedule, edit the schedules and to enable/disable your vacation schedule.

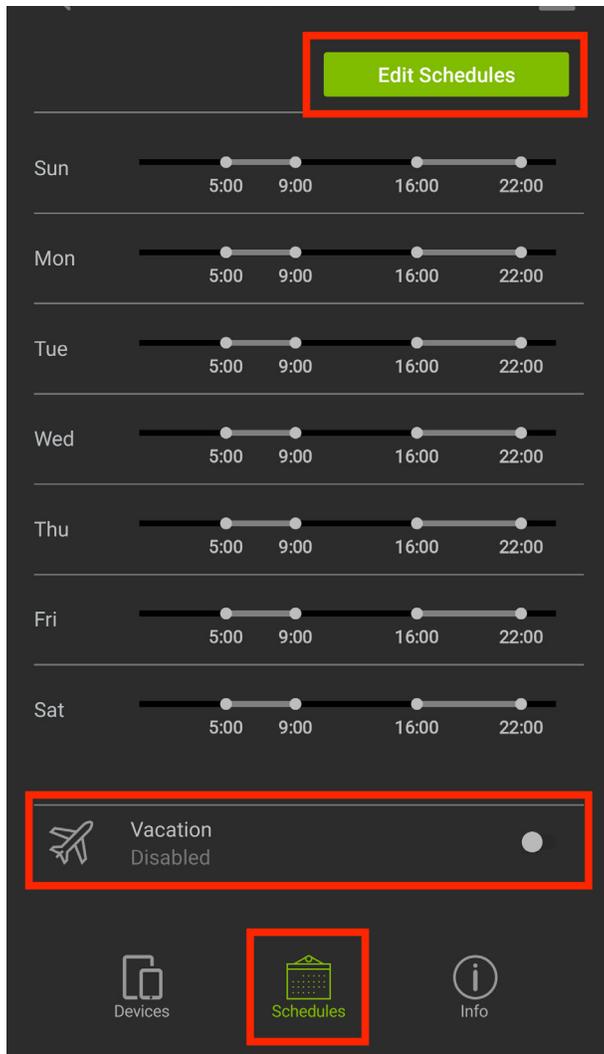
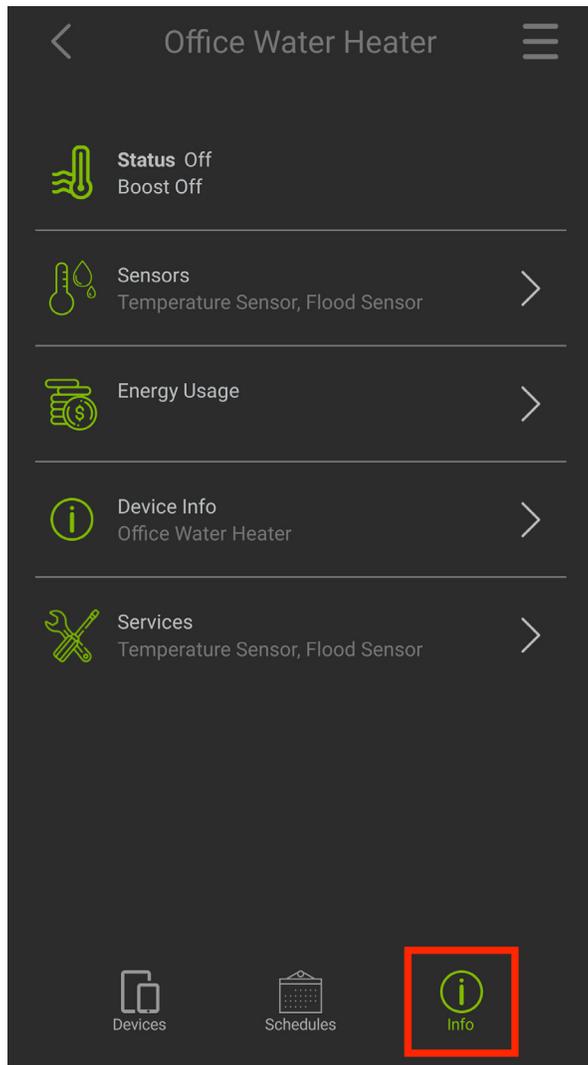


Fig 33-A

## Tapping on the Info Icon

You can tap on the "Info" icon to show the settings or information for the water heater as follows:



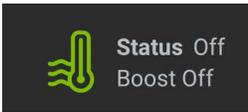
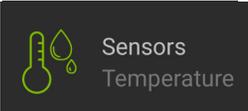
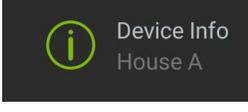
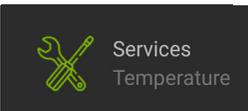
Tap on the icon	To
	Show the status of your water heater.
	Show the status of your connected sensors.
	Show the energy usage and energy cost for a specific period.
	Show the information for your device.
	Show the settings for Alerts and Reminders.

Fig 34-A

## Using the Menu

Tap on the  icon and you will see more options:

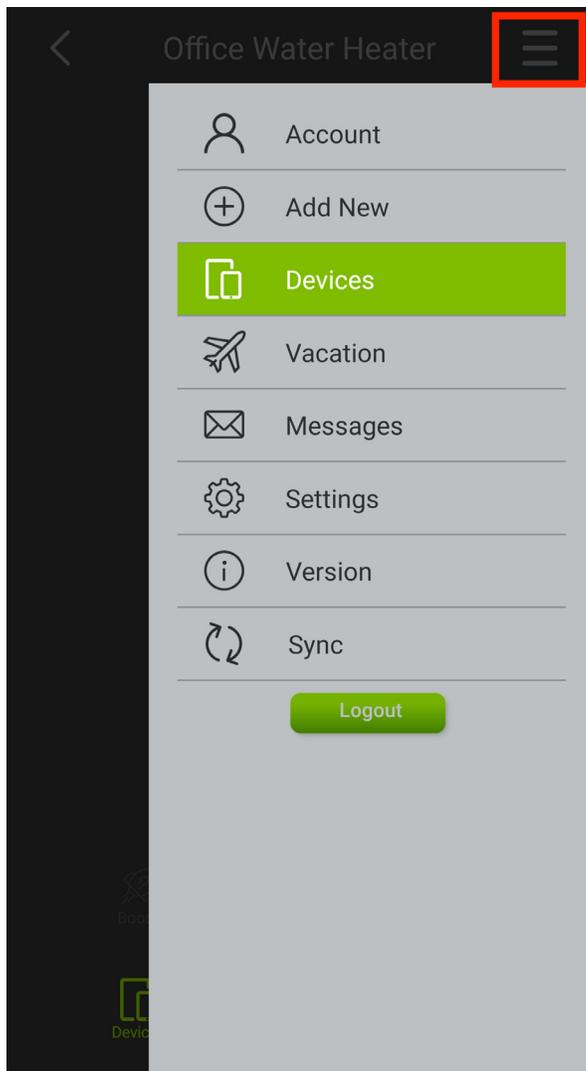


Fig 35-A

Select	To
 Account	Change your account information.
 Add New	Add a new device in the TrickleStar Portal mobile web interface.
 Devices	View and select the connected devices. If you have multiple sites, it will show all Site names. Tap on your desired Site, it will show all connected devices in that Site.
 Vacation	Update your vacation settings and enable/disable the vacation schedule.
 Messages	Check and delete your messages.
 Settings	View or change the General Settings for the Water Heater Controller.
 Version	Check the App's version and to access the TrickleStar Website, Privacy Policy, and Terms and Conditions.
 Sync	Sync the information from the Portal.
 Logout	Log out from the App.

## Maintenance

### Factory Reset

If you need to reset your Water Heater Controller to factory default settings, please do the following:

1. Press and hold the power button for at least 30 seconds until the "connectivity" indicator flashes in red/green/blue.
2. Go to Portal, select the Water Heater Controller and click "Delete".
3. Click "Add New + " to add your Water Heater Controller. Then, follow the instruction guide.

All settings will be deleted and the Water Heater Controller will reset to factory default settings.

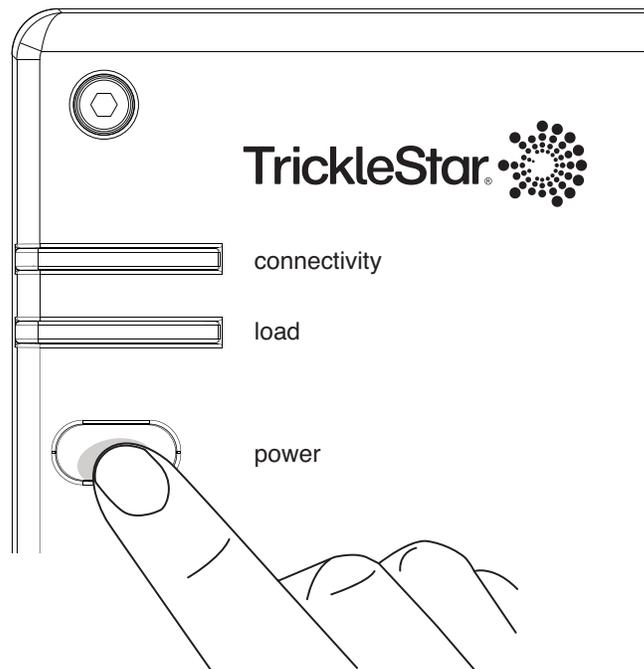


Fig 36-A

### Wi-Fi Network Reset

If you have changed to or added a new network, and you want to reset your Wi-Fi network for the Water Heater Controller, perform a Wi-Fi Network Reset.

At the Portal, select: Devices -> Device Name -> Settings -> Device Info icon -> Connected Network (SSID) -> Configure.

Follow the steps to reset your Wi-Fi network for the Water Heater Controller and reconnect your Water Heater Controller to the Portal.



## Firmware Update

The Portal will occasionally transfer a firmware update to your Water Heater Controller. After the new firmware is installed, your Water Heater Controller will restart and reconnect to the Portal and App automatically.

*Note: The firmware update cannot be initiated on the Water Heater Controller, and it cannot be canceled or postponed.*



## Cleaning the Water Heater Controller

Clean your Water Heater Controller with a clean cloth.

*Note:*

- *Do not spray any water or liquid directly onto your Water Heater Controller.*
- *Do not use soap or any type of cleaning chemicals on your Water Heater Controller.*

## Troubleshooting

Problem	Solution
<p>I changed the settings on the Portal but the App does not reflect the changes or vice versa.</p>	<ul style="list-style-type: none"> <li>• Depending on the internet connectivity, it may take a few minutes to reflect the changes on the Portal or App. This is not a malfunction.</li> <li>• Refresh the Portal or App as follows:               <ul style="list-style-type: none"> <li>- For Portal: Refresh the browser.</li> <li>- For App: Select "Sync".</li> </ul> </li> </ul>
<p>I do not know which reset to perform.</p>	<ul style="list-style-type: none"> <li>• If you want to reset your Water Heater Controller to factory default, perform a Factory Reset by referring to pg. <a href="#">36</a>.</li> <li>• If you have changed to or added a new network, and you want to reset your Wi-Fi network for the Water Heater Controller, perform a Wi-Fi Network Reset by referring to pg. <a href="#">36</a>.</li> </ul>



## Troubleshooting

Problem	Solution
I cannot register the Water Heater Controller via the TrickleStar Portal.	If the TrickleStar Portal requests for DSN number, refer to the label at the back of the Water Heater Controller. You will find the DSN number at the label. The DSN number can also be found on the Water Heater Controller packaging. Note, the DSN number is case-sensitive.
I cannot connect to the Portal or App.	<ul style="list-style-type: none"><li>• Check if your mobile devices are connected to Wi-Fi.</li><li>• Your Water Heater Controller may be installing a new firmware update. When the firmware installation is complete, you will be reconnected to the Portal and App automatically.</li></ul>

If the problem persists, you can refer to the Frequently Asked Questions (FAQ) section on our website, or email or call our technical support:

Website: [www.tricklestar.com](http://www.tricklestar.com)

Email: [customer.service@tricklestar.com](mailto:customer.service@tricklestar.com)

Toll Free: 1-888-700-1098

## Feature List

This Feature List shows the locations where you can perform the listed features. The Portal supports the entire set of features, whereas the App and the Water Heater Controller unit only support a limited set of features. This Feature List is created based on the Portal structure so that you can find the features you want easily.

● Available      — Not available

Features	Water Heater Controller	Portal	App
<b>Basic Features</b>			
Factory Reset	●	-	-
<b>Advanced Features</b>			
<b>Dashboard</b>			
General Settings		<a href="#">9</a>	<a href="#">35</a>
Message Settings			
• Receive System Notifications	-	●	●
• Receive Schedule Events	-	●	●
• Receive DR Events	-	●	●
• Receive Device Errors and Warnings	-	●	●
• Receive Configuration Events	-	●	●
Power Setting			
• Cost Per kWh	-	●	●
Other Settings			
• Currency	-	●	●
• Temperature Unit	-	●	●
• Time Zone	-	●	●
• Date Format	-	●	●
• Time Format	-	●	●

Features	Water Heater Controller	Portal	App
Messages	-	●	●
Account		<a href="#">9</a>	<a href="#">35</a>
• Account Settings	-	●	●
• Change Password	-	●	-
• Delete Account	-	●	-
Sharing		<a href="#">9</a>	
• Site Management	-	●	-
• Delegation	-	●	-
• Ownership Transfer	-	●	-
Wi-Fi Electric Water Heater Controllers		<a href="#">11</a>	
• No. of Device	-	●	-
Outdoor Temp. (Location)		<a href="#">11</a>	
• Current Temperature	-	●	-
• hi temperature	-	●	-
• lo temperature	-	●	-
Water Heater Controller - Device List		<a href="#">11</a>	
• Online / Offline	-	●	●
• Temperature	-	●	-
• Schedule	-	●	-
• Energy Usage	-	●	-
<b>Devices</b>		<a href="#">12</a>	
Delete	-	●	-
Add New +	-	●	-
Show	-	●	-
Search	-	●	-

Features	Water Heater Controller	Portal	App
<b>Control</b>		<a href="#">12</a>	<a href="#">32</a>
• Boost	-	●	●
• Mode	-	●	●
<b>Energy Usage</b>		<a href="#">12</a>	<a href="#">34</a>
• Select a period	-	●	●
<b>Schedules</b>		<a href="#">12</a>	<a href="#">33</a>
• Schedule Overview	-	●	●
• Add Schedule Event	-	●	-
• Edit Schedule Event	-	●	-
<b>Settings</b>		<a href="#">12</a>	
<b>Temperature Settings</b>			
• Safety Minimum Heat Temperature Setpoint	-	●	-
<b>Boost Settings</b>			
• Boost Enabled	-	●	-
• Boost Time	-	●	-
<b>Information and Time Zone</b>			
• Device Information			<a href="#">34</a>
- MAC Address	-	●	●
- Serial Number	-	●	-
- Device Name	-	●	●
- Firmware Version	-	●	●
- Type of Connection	-	●	●
- Connected Network (SSID)	-	●	●
- LAN IP Address	-	●	-
- Registration Date	-	●	-
- Device Location	-	●	-
- Time Zone	-	●	-

Features	Water Heater Controller	Portal	App
<b>Sensors</b>			
• Temperature Sensor	-	●	-
• Flood Sensor	-	●	-
<b>Services</b>			
<b>Low Temperature Alerts</b>			
• Temperature Setpoint	-	●	-
<b>Vacation</b>		<a href="#">29</a>	<a href="#">35</a>
Vacation dates	-	●	●
Devices	-	●	●
Status	-	●	●
<b>3rd Party Integration</b>		<a href="#">30</a>	
• Amazon Alexa	-	●	-
• Google Home	-	●	-



For technical support, go to:  
Website: [www.tricklestar.com](http://www.tricklestar.com)  
Email: [customer.service@tricklestar.com](mailto:customer.service@tricklestar.com)  
Toll Free: 1-888-700-1098

© 2021 TrickleStar Inc.

TrickleStar® is a registered trademark of TrickleStar Ltd. All other trademarks are the property of their respective owners. The information in this document is subject to change without notice. TrickleStar assumes no responsibility for any errors that may appear in this document.