

# Quick start guide: NBE Wi-Fi temperature sensor



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#### NBE PRODUCTION A/S

Kjeldgaardsvej 2 9300 Sæby www.nbe.dk



# Description

The **NBE WIFI Temperature Sensor** is ideal for temperature references for weather compensation reference zone 1 or zone 2, Indoor temperature reference, External Stop Temp reference etc. Compatible with V13 controllers that include RTB V13, BS+, and RTB AIR. Not compatible with V7 or V10 controllers. The WIFI temperature sensor can be wirelessly paired directly to the boiler or via the router/home network.

#### Activity Light:

Will blink during pairing. Pairing will begin as soon as batteries are inserted.or when Send Data is pressed.

## Send Data:

Press button to reset pairing and begin new pairing. Sensor must be within 1-2 meters of the boiler when performing direct pairing.

# Dense Dense

#### **CR123A Batteries**

3 batteries included.. Battery lifetime is about 1 year, but is sensitive to environmental temperatures and WIF sensor speed settings. See page 6

## USB power

USB power port allows you to power the sensor directly via a USB plug. **Note**: When powering via the USB power plug you must <u>only</u> use the *Ext Temp* input port as the ambient heat of the power plug will cause the *Int Temp* sensor to rise and give a false reading.

USB power plug is sold separately.

# Ext Temp (input):

Ext Sensor is already premounted on EXT TEMP; however you are able to connect a NTC temp sensors for example for Water or outdoor temp reference applications.

# Ext /Int Temp Switch

Dongle allows you to specify between Ext Temp input or built-in Internal Temp Sensor located at the back of the board.



# Pairing the wireless sensor directly to the boiler's local network

- 1. Maintain a close proximity between the wireless sensor and boiler i.e. within 1-2 meters from the boiler. If you have multiple boilers in the area keep the sensor closest to the boiler you would like to pair.
- 2. Insert 3 batteries into the slots as pictured.
- Check that the activity lamp is blinking. This indicates that the the pairing process has begun.
- 4. After 2 minutes the blue light will no longer blink indicating that the pairing is complete.

*Note:* The pairing setting will be automaticaly saved unless the batteries have either died or have been removed. If you want to manually reset the pairing, do so by pressing the SEND DATA button. This will restart the pairing process.

5. To assign the wireless sensor to a function in the V13 app See page 5: Assigning the wireless sensor to a function in the V13 app





# Pairing the wireless sensor to the boiler via the router

- 1. Insert 3 batteries into the slots as pictured.
- 2. Check that the *Activity Light* is blinking (cicled in red). The blinking light indicates that the module has started and awaits setup via the embedded web server.
- 3. Using a laptop or similar find the wifi network "NBE-SENSOR-xxxx" where xxxx is a unique number. Connect to this network. No password is required.



4. Using a web browser, for example Chrome, insert the web address: <u>http://192.168.1.1</u>

thtp://192.168.1.1/	- X Søg	
erCloud controller ser 🍐 StokerCloud - NBE Produ 🏠 Serie NR-service	Connects to RTB-34133 if nothing is	s specified below.
	Measured temperature: Measured temperature with offset temp.:	24.9 °C 24.9 °C
20 10 10 10 10 10 10 10 10 10 1	SSID / network name: SSID Password: Wifi sensor functionality Wifi sensor speed	Air 🗸

- 5. Under the field *SSID*, type in the name of your WIFI router. This field is case sensitive so remember to insert the name exactly as it is written. If you cannot remember your WIFI router name you are typically able to find it on a label on the bottom of your router.
- 6. Under the field **SSID** *Password*, type in the password for your router. The password is also typically found on your router's label.
- 7. Press *Submit*. The wireless sensor is now paired with your router. If your boiler is connected to the same router the wireless sensor will be able to communicate with your boiler.
- 8. To assign the wireless sensor to a function in the V13 app *see page 5*: Assigning the wireless sensor to a function in the V13 app.
- 9. To see additional setting and functions see *page 6*

# Assigning the wireless sensor to a function in the V13



# арр

Once your wireless temperature sensor has been paired with either the boiler directly (see page 3) or to your boiler via your router (see page 4) you will now be able to assign your WIFI temp sensor to a temperture input function. You can for example use the sensor as a DHW reference, indoor temperature reference, forwarding temperature reference etc.

To do this:

- 1. Open the V13 app.
- 2. Choose the menu where you would like to assign the wireless temp sensor, for example in weather compensation/Input temp sensor.

	Ref. temp. Zone 1	
		Ð
Vejrkompens	se www.temp.	Tilbag
(?) Aktiv	wifi-5ccf7(r/205(n) (16.3*C - sidst 24s - max timeout 3600 total 3737)	
Anlægs temp. Zone 1	et anlægstemperatur	Max. effekt
? Ref. temp. Zone 1	12	? 50 %
Gennemsnit temp. over (timer)	T3	?) 100 %
(?) Chill faktor betydning (%)	T4	?) 100 %
Ventil ved VVB drift	T5	?) 100 %
Anlægspumpe Zone 1	T6	?) 100 - %
? Zone 1 ventil åbne		?) 100 %
Zone 1 ventil lukke	T8	
? P-led	T9	
Ventil åbningstid	FORTRYD GEM	<b></b> •
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- 3. In the list you will find all the possible temperature inputs. These will include all the wifi sensors that are paired with either the boiler directly or via your router.
- 4. Select the desired wifi temp sensor and select *Save*.



# Additional Settings and Functions

Additional settings and functions for the sensor can be adjusted via the sensor's webserver by connecting to the WIFI network NBE-SENSOR-xxxx using a laptop (no password required) and opening a web browser with web address <u>http://192.168.1.1</u>



The following parameters can be adjusted:

## 1. WIFI sensor functionality

- *a) Air*-sends temperature changes from 0.1 °C and above
- *b) Weather*-sends temperature changes from 1 °C and above
- *c) Water*-sends temperature changes from 0.5°C and above

## 2. WIFI sensor speed

- a) Fast-measures temperature every 30 seconds. (low battery life)
- b) Medium- meaures temperature every 2 minutes (moderate battery life)
- *c) Slow*-measure temperature every 5 minute (max battery life)

*Note:* Default settings for the sensor is set to Air and Medium.



# **Frequently Asked Questions**

## How long do the batteries last?

You can expect a battery life of about 1 year; however this depends significantly on the room temperature and the rate in which the sensor is sending data..

# What does the SEND DATA button do?

The SEND DATA button will reset the sensor and will relaunch the pairing process with either the closest boiler or with the boiler via the router. Once pressed, the Activity light will flash indicating that the web server is accessible. Note: If the sensor is connected directly to the boiler, it will attempt to pair with the closest boiler to the sensor. Therefore, be sure that the sensor is closest to the boiler that you desire to pair it with when using the SEND DATA button.

# The sensor cannot be found in the app.

- Check that the batteries are turned in the right direction.
- Check that the Activity light is blinking when the batteries are inserted. If it does not blink, try pressing the SEND DATA button and check that the *Activity light* begins to blink.
- If you are connecting directly to the boiler make sure that the sensor is close to the boiler when pairing.
- If the sensor is connected via the router, ensure that the router name is spelled correctly.

# How do you access the webserver where the sensor's settings can be found?

Connect to the WIFI network called NBE-SENSOR-xxxx. No passoword is required. Open a browser , for example chrome, and type in the address <u>http://192.168.1.1</u>