



## operation manual



süd  wind



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## 1 INTRODUCTION

Congratulations on the purchase of your new **radon system!** You have decided in favor of a high-quality product that now takes care of your radon-loaded rooms.

The operating instructions are part of this product, hereinafter referred to as the device. It contains important information on safety, use and disposal. Familiarize yourself with all operating and safety instructions before use. Use the product only as described and for the specified areas of application. Please keep this user manual safe. Hand over all documents when passing the product on to third parties.

If you have any questions, you can of course contact us at any time.

The radon system measures the radioactive decay of radon and its decay products in the air. These are summed up over 10 minutes and displayed as a radon value in becquerels per cubic meter (Bq/m<sup>3</sup>). One Bq/m<sup>3</sup> means that one radon nucleus decays per second in one cubic meter of air.

Note: The radon concentration in buildings varies depending on the season and weather conditions. The highest values are usually measurable in winter. In addition, the load decreases with higher floors. There will therefore be significantly more radon in the basement than in the attic.

## 2 WARRANTY

The guarantee begins on the invoice or delivery date and is 36 months for all devices purchased after January 1st, 2021. During the warranty period, any defects will be eliminated free of charge. If you discover a defect, you are obliged to report it to the manufacturer immediately. It is at the discretion of the manufacturer to honor the warranty by sending replacement parts or repairing. If spare parts are dispatched, the right to exchange without loss of guarantee exists. A repair at the place of installation is excluded. The guarantee only applies to material or manufacturing defects. The warranty is void in the case of wearing parts or damage caused by abusive or improper treatment, use of force and interventions carried out without prior consultation with our service department. If possible, please keep the original packaging for the duration of the guarantee period in order to adequately protect the goods in the event of a return.

Do not send goods freight collect to the service department. Claiming warranty services does not result in an extension of the warranty period. Claims for compensation for damage that may occur outside of the device (unless liability is stipulated by law) are excluded.

**Opening the device will void the warranty.**

## 3 SAFETY INSTRUCTIONS

**DANGER!** Failure to comply with the safety information and instructions listed below can cause an electric shock.

1. Read this user manual completely before use.
2. If the device is passed on to third parties, these operating instructions must also be handed over.
3. This device complies with the technical standards and the relevant safety requirements for electrical devices.
4. The device shall not be used by children.
5. Keep the device away from children.
6. Children should be supervised to ensure they do not play with the device. This also applies to cleaning the device.
7. Do not allow persons unfamiliar with the device or who have not read these instructions to use the device.

8. **ELECTRICITY AND SHORT-CIRCUIT HAZARD!** Under no circumstances should you open the housing. Do not insert any objects into the housing. In this case, there is no security and the warranty expires.

9. **FIRE AND SHORT CIRCUIT HAZARD!** Do not submerge the device or any of its accessories in water or use them near water.

Do not let liquids get into the device and the sensors.

10. **SHOCK HAZARD!** Should the device fall into water or should liquids get into the interior of the device, pull out the mains plug immediately.

Before using the device again, check it and, if necessary, have it repaired by qualified personnel.

11. **SHOCK HAZARD!** Do not use the device outdoors.

12. **SHOCK HAZARD!** Do not use the device if it is damaged or if the device has been dropped or damaged in any other way.

## 4 SET UP THE RADON SENSOR

To turn on the device, plug the power adapter into the radon sensor and into a power outlet. After that, operation will start automatically. Various setting options are explained below.

### Important:

**The radon sensor should be touched little or not at all during operation and should never be exposed to shocks, vibrations or strong fields (near hair dryers, electric motors, etc.). The radon sensor is an extremely sensitive instrument for measuring radioactive decay. If you handle it carefully (avoid falling and tipping over), the sensor will have a very long service life and will serve you well.**

### 4.1 Main Screen

The value on the screen is updated every 10 minutes.

In the middle is the current mean radon value in Bq/m<sup>3</sup>.

Below are the currently counted decays in this 10 minute interval to the left of the slash and to the right are the counted decays from the previous 10 minute sweep. **First values are displayed after 10 minutes.**



**4.2 Settings screen** Pressing the OK button will take you to the settings screen.

#### 4.2.1 Mean Since

radioactivity is a random phenomenon, the values can fluctuate over the intervals. A 30-minute average is therefore formed as standard. You can change this averaging interval by pressing the UP/DOWN buttons on the sensor. Adjustable are 10 minutes, 30 minutes and 60 minutes.

The longer the interval, the more accurate the reading, but it also takes longer for the sensor to display the change in value. The smaller the interval, the less accurate the value, but the faster you can catch changes. So 30 minutes is a good compromise. Pressing OK confirms the selection.

**Example:** You open the window and the radon gas can escape from the apartment. This significantly reduces the counted decays. With a 10 minute average, you will see a sharp drop in radon levels over the next 10 minutes. With a 60-minute average, it can take up to 60 minutes for this change to appear on the display. This could give the impression that airing is useless. On the other hand, the 10-minute average values fluctuate greatly. As a compromise, we have therefore set the 30-minute average as the standard.

#### 4.2.2 Send Next

you will be asked how you want to communicate with the sensor. Use the UP/DOWN buttons to change the value. There are the following options: **1. Bluetooth:** You can use the app to read out the sensor via Bluetooth.

**2. WLAN (only if WLAN was also ordered):** The sensor connects to your router and sends the values to our server, from where you can retrieve the data. How to enter the access data is explained in the "APP SETUP" section. Bluetooth is still on.

**3. Off:** You can also set the sensor to not send anything at all. Bluetooth and WLAN are switched off. You can still see the values on the display.

Confirm your entry with OK.

**All settings can be changed at any time.**

**Once the sensor is powered off and powered on again, it retains all saved settings. The setup is only necessary once.**

#### 4.3 WLAN test (only if WLAN was also ordered)

If you press the DOWN button and "Send" is set to "Yes", the sensor will test the WiFi connection and send the current value, which you can then check on the app. This is useful if you want to move the device to another location and check if the device is still within range of the router.

#### 4.4 Display WLAN access data (only if WLAN was also ordered)

If you have entered the WiFi access data via the app (explained in the next section), you can read the access data on the sensor by pressing the LEFT button. This way you can check whether you made a typing error.

## 5 APP SETUP

The radon system app is available for Android and iOS and can be downloaded from the respective store. Just search for "radon system".

### 5.1 Android With

the Android app you will see three buttons on the start page:

1. **Connect via Bluetooth:** Press to connect the sensor via Bluetooth read out. Note that for Android 10 and higher, both Bluetooth and GPS must be turned on. This is unfortunately intended by Android and cannot be changed by us. Location data is not retrieved by us.
2. **View saved measurements:** Here you can view measurements that you have saved on your smartphone over time.
3. **Enable internet access:** So that you can access data from your radon system our server, you must first be activated. If you bought WiFi, your Radon system can simply unlock it.

#### 5.1.1 Connect via Bluetooth: On the

Bluetooth screen, click "Connect". The sensor is then searched for and the data is loaded. This may take a moment depending on how many months you have saved. If you are too far away, an error message will appear after 10 seconds.

**Both Bluetooth connection and disconnection are confirmed with a beep.**

The charts only appear after an hour.

When the charts are displayed, you can view the day and month views and change the day.

**When the radon system is restarted, the radon values stored in the device are deleted and can therefore no longer be read out via Bluetooth.** If you want to delete the values without a restart, the "Delete" button is located below. You can therefore save the measurement at the top right using the three dots in the menu (you can then find this on the start screen under "View saved measurements") or export it as a CSV file by e-mail. Both are also important if you want to organize your measurement by room etc.

**5.1.2 View saved measurements:** Here you can view the measurements that you have read out and saved via Bluetooth. Here, too, there is an export function via email as a CSV file.

**5.1.3 Activating internet access** This menu item is only important if you ordered WiFi when you made the purchase.

Your Radon system can enable you to access the Internet so that you can retrieve the data from our server. To do this, connect to the sensor via Bluetooth.

This will now unlock you and you can then go back to the start screen of the app.

A new button "Connect via Internet" is now displayed here. If not, you would have to restart the app once for the changes to take effect.

#### 5.1.4 Connecting via the Internet

Here, your Radon system was added to the list of your devices as a result of the previous activation. Click on the device to retrieve the already sent data from the server. You can add new devices at any time using the button at the bottom right.

To do this, you need the device ID (also called Appld) of the new sensor. How to find this is explained in the "Device ID" chapter. You can choose the name freely.

##### 5.1.4.1 *Edit WiFi access data* Important: If you

want to call up data for the first time, you have to tell the device the WiFi access data for your router once. Otherwise no WLAN connection is possible. To do this, click on the three dots in the menu at the top right. Again, connect to the sensor via Bluetooth and enter the access data.

Then press "Send".

Now look at the display of the radon system. After a few moments, the send should be successful. If you make a mistake, "error" will appear on the display after a while. As described in Chapter 4.4, you can look at the access data and check whether you made a typo. But it could also be that you are too far away from the router. You can change the access data at any time as described above and try again. If it worked (i.e. there is no "error" on the screen), you should see the first data in the app within the next hour.



## 5.2 iOS

With the Android app you will see three buttons on the start page:

1. **Connect via Bluetooth:** Press to connect the sensor via Bluetooth read out.
2. **View saved measurements:** Here you can view measurements that you have saved on your smartphone over time.
3. **Enable internet access:** So that you can access data from your radon system our server, you must first be activated. If you bought WiFi, your Radon system can simply unlock it.
4. **Clear device data:** If you want to clear the values without a Reboot, press this button.

### 5.2.1 Connecting via Bluetooth

On the Bluetooth screen, click Connect. The sensor is then searched for and the data is loaded. This may take a moment depending on how many months you have saved. If you are too far away, an error message will appear after 10 seconds.

**Both Bluetooth connection and disconnection are confirmed with a beep.**

The charts only appear after an hour.

When the charts are displayed, you can view the day and month views and change the day.

**When the radon system is restarted, the radon values stored in the device are deleted and can therefore no longer be read out via Bluetooth.** You can therefore save the measurement in the menu at the top right (this can then be found on the start screen under "View saved measurements") or export it as a CSV file by e-mail. Both are also important if you want to organize your measurement by room etc.

**5.2.2 View saved measurements:** Here you can view the measurements that you have read out and saved via Bluetooth. Here, too, there is an export function via email as a CSV file.

**5.2.3 Activating Internet access** This menu item is only important if you ordered WLAN at the time of purchase.

Your Radon system can enable you to access the Internet so that you can retrieve the data from our server. To do this, connect to the sensor via Bluetooth.

This will now unlock you and you can then go back to the start screen of the app. A new button "Connect via Internet" is now displayed here. If not, you would have to restart the app once for the changes to take effect.

### 5.2.4 Connecting via the Internet

Here, your Radon system was added to the list of your devices as a result of the previous activation. Click on the device to retrieve the already sent data from the server. You can add new devices at any time using the button at the top right.

To do this, you need the device ID (also called Appld) of the new sensor. How to find this is explained in the "Device ID" chapter. You can choose the name freely.

### 5.2.5 Editing the WiFi access data Important:

If you want to call up data for the first time, you have to tell the device the WiFi access data for your router once. Otherwise no WLAN connection is possible. Again, connect to the sensor via Bluetooth and enter the access data. Then press "Send".

Now look at the display of the radon system. After a few moments, the send should be successful. If you make a mistake, "error" will appear on the display after a while. As described in Chapter 4.4, you can look at the access data and check whether you made a typo. But it could also be that you are too far away from the router. You can change the access data at any time as described above and try again. If it worked (i.e. there is no "error" on the screen), you should see the first data in the app within the next hour.

### 5.2.6 Delete device data If you

want to delete the radon values in the sensor, for example because you want to carry out a new measurement at the same location, you can do that here. Note that no settings and access data are deleted here, only the measured radon values. The rest is preserved. A Bluetooth connection is also required for this.

## 6 DOES MY RADON SYSTEM SUPPORT WLAN?

If you want to find out whether your Radon system is not only Bluetooth-enabled but also supports WLAN, you can press the OK button and change the set value for "Send:" using the UP/DOWN arrow buttons. If you only see "Bluetooth" and "Off", your device does not support WiFi. If "WLAN" is also displayed, you can use it.

If it is not displayed for you, you can upgrade it via our website <https://radonsystem.de/upgrade-reorder>. All you need is your device ID. How to find it is in the next chapter.

## 7 DEVICE ID The

Device ID is a unique number for each Radon system. It is stored in the device and can be shown on the display by pressing the UP button. The number is an 8 to 18 digit number combination.

You only need the device ID for the following scenarios:

- Adding new radon systems in the app
- Purchase of the upgrade in the shop to activate the WLAN function
- When picking up the rental device in the shop if you select WLAN

## 8 TECHNICAL SPECIFICATIONS

type designation	radon system
Electrical connection	220-240V ~ 50Hz, 5V wall adapter
technology	ionization pulse chamber
measuring range	0 to 10000 Bq/m <sup>3</sup> <
deviation	10%
WiFi connection	2.4GHz
storage duration	1 year

## 9 CLEANING, MAINTENANCE AND STORAGE

1. Before cleaning, also observe the safety instructions.
2. Also unplug the power cord.
3. To clean the device, use a slightly damp cloth and, if necessary, a mild cleaning agent. Be very careful when cleaning. The housing is open to the outside so that the measurement can be carried out with sufficient accuracy. The use of water for cleaning should be avoided here.
4. Make sure that no water enters the interior of the housing. Never immerse the device in water or other liquids during cleaning or operation. Do not hold any part of the device under running water.
5. Choose a place that is protected from dust, moisture and direct sunlight for storage and operation of the device and its accessories. Keep the device out of the reach of children.

## 10 ENVIRONMENTAL PROTECTION



The packaging materials are recyclable. Please do not throw the packaging in the household rubbish, but have it recycled.



Old devices contain valuable recyclable materials that should be recycled. Therefore, please dispose of old devices using suitable collection systems.



The EU declaration of conformity can be requested from the specified manufacturer address.