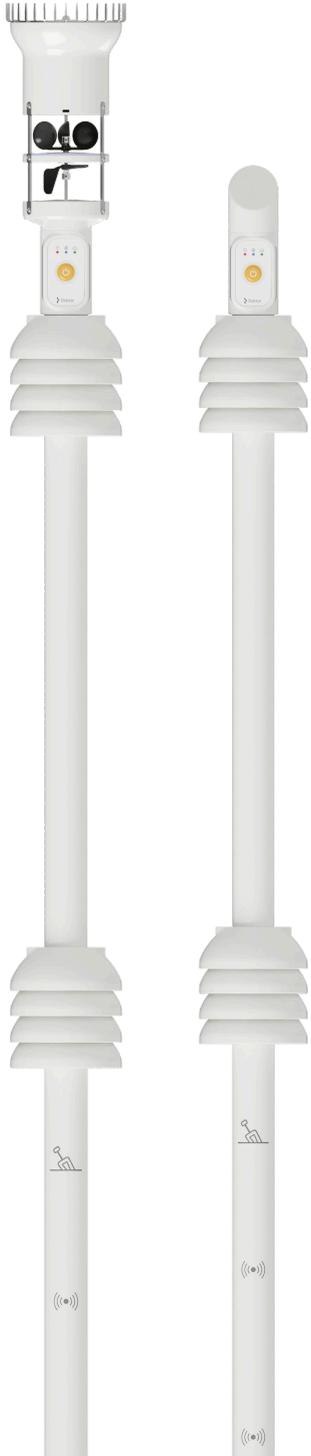


FieldStation

User Manual





If you have more questions regarding the FieldStation, please feel free to contact us at info@doktar.com



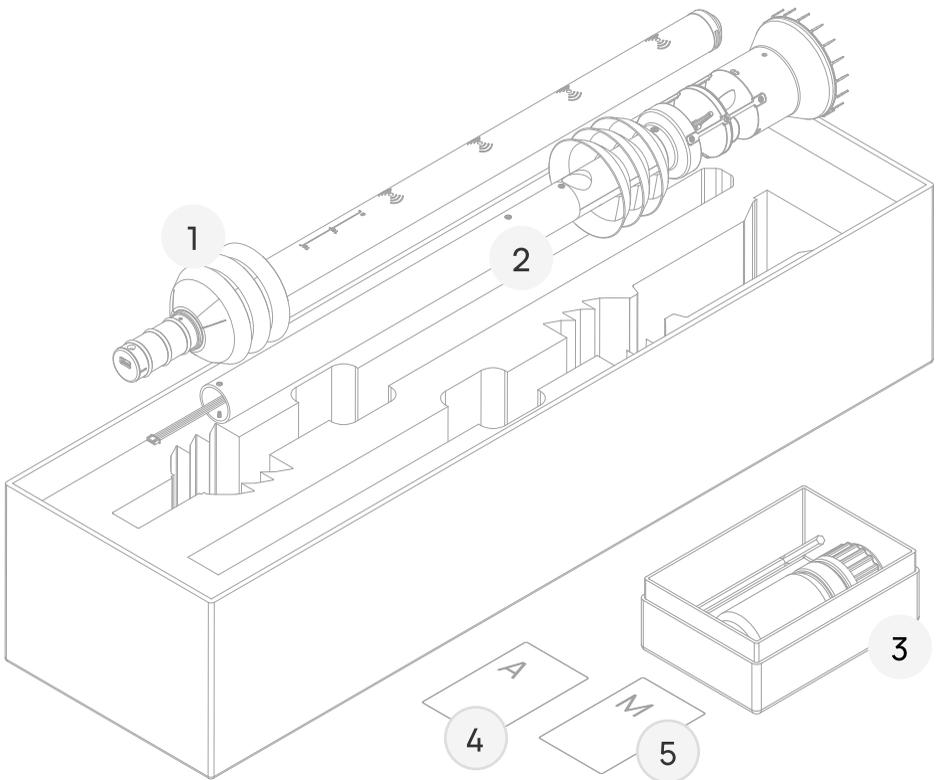
Doktar App allows you to track Doktar's IoT devices from a single application.

Contents

| | |
|---|----|
| Sensors & Parts | 2 |
| Safety first | 3 |
| General use | 4 |
| Installation | 6 |
| Using Dokter App | 8 |
| Getting the best out of your FieldStation | 9 |
| Caring for your FieldStation | 10 |
| Charging and battery | 11 |
| Product details | 12 |
| Service and support | 13 |

Sensors & Parts

- 1 — Bottom module
- 2 — Top module
- 3 — Accessory box
- 4 — Assembly guide
- 5 — Manual



Safety and Precautions

Make sure to read this page to be safe and keep your device safe.



The device includes sensitive electronic components. To prevent damage to these components, protect them from falls, burns, punctures, or impacts, and prevent electronic parts from coming into contact with water.



The bird-repellent mechanism in FieldStation Pro poses potential hazards that can damage the eyes and skin. Exercise caution when handling this mechanism and take protective measures when necessary during device use.



Exercise caution when using agricultural machinery, especially tractors, to prevent accidents. Take necessary precautions to ensure the device's safety.



Do not immerse FieldStation in water for cleaning or any other purposes.



Do not disassemble FieldStation by screw points or any other parts.



The warranty may become invalid if you disassemble or repair the device without contacting Doktor Technologies. Damages caused by user faults are considered out of the warranty scope.

Follow the instructions carefully to prevent potential out-of-warranty situations, as detailed in the warranty document.

Using your FieldStation

First things to do when getting your hands on FieldStation

1. After unboxing your FieldStation make sure to find a location that suits the following criteria:



A point should be chosen to reflect the whole field as much as possible.



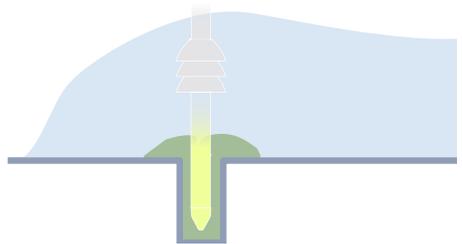
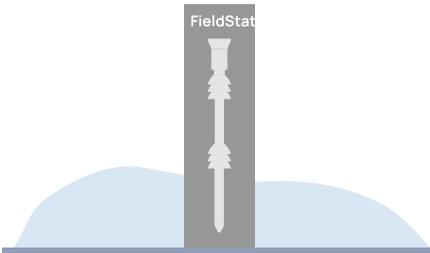
It should not be too close to trees, structures or ponds.



It should not be too close to the edges of the field.

2. Assemble and mount your FieldStation in the chosen location.

Make sure to follow the installation guide in the next pages, to avoid mistakes and misdirection.



3. Download the Doktor App and pair your device.



Detailed information on how to download, pair and navigate the application is on page 8 of the manual.

Feedback and Button

Read this quick guide to understand your device.

Your FieldStation device have a single button for all purposes, so it is important to understand which combinations achieve which results.

Power

Power on ●●●|||

Press and hold for 5 seconds to turn on the device.

Shut down ●●●■

Press and hold for 5 seconds to turn off the device.

Check status

Busy status |||

Press once, If there are 3 short beeps, then the device is busy.

On status | |||||

Press once. If device is on, you will hear 1 long and 6 short beeps.

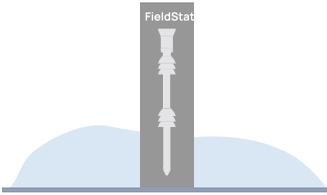
Off status | ■

Press once. If device is off, you will hear 1 short and 1 long beeps.

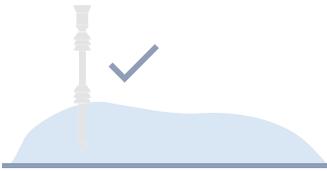


Installation tips

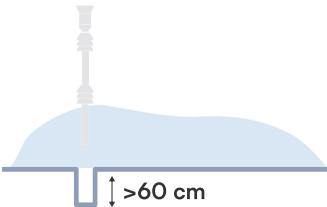
Steps to mount your FieldStation correctly.



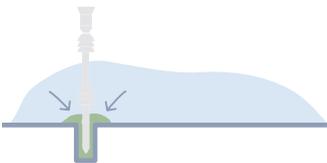
- 1 Bring FieldStation package to the field



- 2 Choose a suitable spot for FieldStation



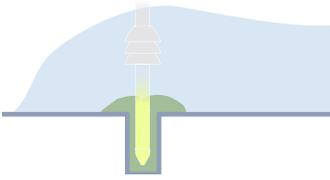
- 3 Dig up a hole of at least 60 cm deep with an auger or a shovel



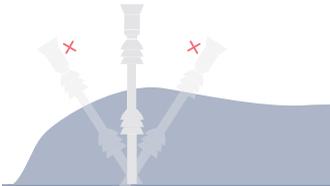
- 4 Place FieldStation in an upright position and fill the rest of the hole with soil

Installation tips

Things to check for after mounting your FieldStation:



Make sure that the lower part of FieldStation is in full contact with the soil and free of gravel. Ensure that the natural soil texture around the sub-soil sensors is not disrupted. Preserving the soil's natural character or at least mimicking it is critical to the accuracy of sensor measurements.



Make sure that FieldStation is firmly embedded and not loose.



Make sure to clean out the slot from leaves in the light sensor from time to time.

Using Dokter App

How to download, register and start using Dokter App

- 1 Download from Google Play or App Store.

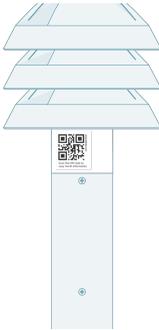


App Store

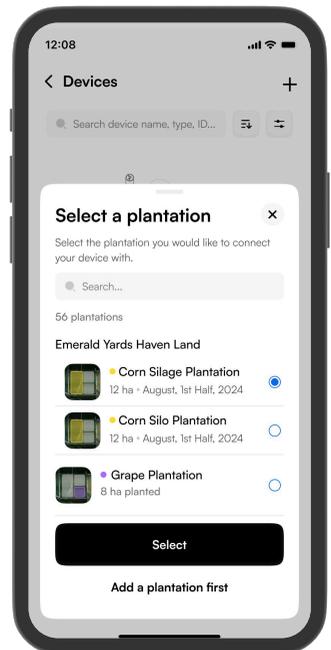


Google Play

- 2 Sign up and add your device using the QR code or entering the unique 8-digit ID on your device.



- 3 Connect your device by adding it to your field.



Getting the best out of your FieldStation

Tips on how to make sure you're using FieldStation to its maximal potential:



The device features a remote update capability and is automatically updated when required.



Device readings are a fundamental reference point of agronomic decisions, emphasizing the need for careful placement.

A tilted or sideways device can make it particularly difficult for sensors to make precise measurements. Therefore, positioning the device in an **upright position** ensures accurate measurement of agricultural data and reliable results.



If the device is located **outside the field and not too close to the roots of the plants**, it may prevent the device from detecting real data and reflecting it to the user.



Make sure to tightly ground the device to ensure accurate humidity results from sensors.



Place the module above plant level to provide more precise and accurate wind speed and direction data.

When positioning FieldStation, it is essential that the N mark points in the North direction in order to identify the wind direction.



Using the Dokter App, you can customize your device's settings and personalize your usage with FieldStation.



In order for the device to work effectively in terms of data transfer, it must be placed in a location with a strong internet signal.

Taking care of your FieldStation

To always get the best performance out of your device, it's important to regularly keep it clean.



Do not expose your device to extreme temperatures, humidity or water.



Regularly clean the device to eliminate contaminants like dust, leaves, and fertilizers, which could impact the accuracy and functionality of the sensors.



In case of clogging, the Rain and Wind sensors on Pro devices should be cleaned as follows:

- Ensure that there are no objects at the entrance of the rain sensor mechanism that could obstruct the water flow.
- Remove the filter on the rain sensor by turning it clockwise.
- If full, rinse it with water and replace it.
- If the filter is clean, but the measurement is inaccurate, remove the cover from the entrance of the mechanism and pull it upwards from the filter body. Clean the inside of the bucket by washing it with water.
- Ensure no foreign objects obstruct the wind sensors' moving area
- If contamination is present on the surface of the wind sensors, movement shaft, or movement area, clean them with water.



Pro modules should be washed with clean water every 6 months and the mud and dust on them should be removed.



Lubricating the bearings in the center of the wind sensors with the device's special mineral oil is recommended. The lack of lubrication or the use of the wrong lubricant may affect the accuracy of the measured data.

Charging and battery

Information on charging your FieldStation and battery tips



The device contains an integrated battery with an approximate lifespan of 2 years. For battery replacement, seek assistance from the service center. Do not disassemble, replace, or attempt to charge the battery.

Storing and transportation

How to properly store your device and transport it, if needed



The original box is designed for storing and transporting the device. When not in use, place the device and its accessories in the box, close it firmly, and store it in a cool, dry place away from direct sunlight. During long journeys, use the original box for careful transportation.



Due to its size, FieldStation may be subject to bumps during transportation. Exercise caution to prevent damage during the transport process.



When not intending to use the device for an extended period, remember to switch it off before storing it. This is crucial for preserving device performance and battery life.

Product details

Technical information on your product

| | |
|-------------------------------------|---|
| Dimensions | FieldStation Standard: 170 x 13 cm |
| | FieldStation Pro: 190 x 13 cm |
| Battery | Li-SoCl ₂ Battery 28.000 mAh - 3.6 V |
| Connectivity | Internet access through NB-IoT and 2G technologies |
| GPS | Built-in GPS |
| Air Temp. Sensors | 2x Capacitive chip -20 °C to +125 °C |
| Soil Temp. Sensors | 3x Conductive chip -25 °C to +85 °C |
| Air Humid. Sensors | 2x Capacitive chip 0% RH to 100% RH |
| Soil Humid. Sensors | 3x Capacitive chip 5% RH to 50% RH |
| Wind Speed Sensor (Pro) | Magnetic speed sensor with cup and movement mechanism 0 km/h to 80km/h |
| Light Intensity Sensor (Pro) | Dual photodiode chip sensor 188 µLux to 88,000 Lux |
| Precipitation Sensor (Pro) | Double bucket rain gauge with a magnetic sensor |
| Box Dimensions | 125 x 35 x 25 cm |

Service center details

Global Technical Support Telephone: +90 (850) 433 6477

Global Technical Support E-mail: support@doktar.com

If technical service is required, you should directly contact with the local technical support team in your area. You can access the list of our local support centers at the end of this webpage: <https://www.doktar.com/en/about-doktar/>.

If there is no technical support center around you, please contact with our global support at support@doktar.com.

If you are instructed to send the device to any technical service center, we strongly recommend that you ship your device in its original box. If the device is not shipped in its box, the user takes the risk for any damage incurred during shipment.



Everything you need in one scan

Scan the QR code for user manuals, warranty documents, installation tips, useful links and more.



If you need help assembling your FieldStation, refer to the Assembly Guide that came with the box.