

# METOS<sup>®</sup>

BY PESSL INSTRUMENTS

## METOS 5

### USER MANUAL

Version 1.0, 12-2024



Thank you for choosing a METOS 5 weather station for monitoring your agrometeorological and other environmental parameters. The METOS 5 has been designed to monitor data with a wide variety of sensor sets. Like all products of the METOS family, it measures, logs and sends data to the FieldClimate platform. The users have access to data through the web and mobile applications as well as via API services which enables interface for other custom applications.

Additional services (ex. plant disease models and hyper localized weather forecasts) are available with a license fee.

#### **METOS 5 systems will be mainly used for:**

- meteorological monitoring,
- site specific weather forecast corrected with local measurements,
- plant disease models,
- soil moisture and irrigation systems monitoring,
- hydrology and flood warning applications,
- environmental monitoring.

## YOUR METOS 5

The METOS 5 consists of a main box with the main electronic board and communication board with internal or optional external antenna, modular metallic parts and separate compartment for the Battery and Solar panel.

In the package with the device you will also find, taped to the solar panel, a sticker with a unique serial number and the keys that grants you the option to register the product under your FieldClimate platform profile and access the measured data.



*On picture: METOS 5*

### **MAIN VARIATIONS**

- **METOS 5 BASE:** a basic METOS 5 station with no physical sensors
- **METOS 5 FROST:** base + wet & dry bulb temperature sensors
- **METOS 5 90-USW:** base + air temperature, relative humidity, ultrasonic wind speed & direction sensor
- **METOS 5 200:** base + rain gauge, air temperature, relative humidity, leaf wetness sensor
- **METOS 5 250:** base + rain gauge, air temperature, relative humidity, leaf wetness, global radiation sensor
- **METOS 5 280-MWS:** base + rain gauge, air temperature, relative humidity, global radiation, mechanical wind speed sensor
- **METOS 5 280-USW:** base + rain gauge, air temperature, relative humidity, global radiation, ultrasonic wind speed & direction sensor
- **METOS 5 300-MWS:** base + rain gauge, air temperature, relative humidity, global radiation, leaf wetness, mechanical wind speed sensor
- **METOS 5 300-USW:** base + rain gauge, air temperature, relative humidity, global radiation, leaf wetness, ultrasonic wind speed & direction sensor

### **SUPPORTED MOBILE NETWORKS:**

METOS 5 supports different communication technologies like 2G, 4G, CatM1, NBIoT, LoRaWAN, WiFi etc. Different options require different setup which are described in the METOS 5 extended manual.

### **SUPPORTED SENSORS:**

METOS 5 is a long-term product with guaranteed firmware updates that typically include support for newly added sensors. It is recommended to check which sensors are supported with your software version or ensure the device is running the latest firmware version. A full list of supported sensors can be found in the extended user manual.

## START-UP THE METOS 5

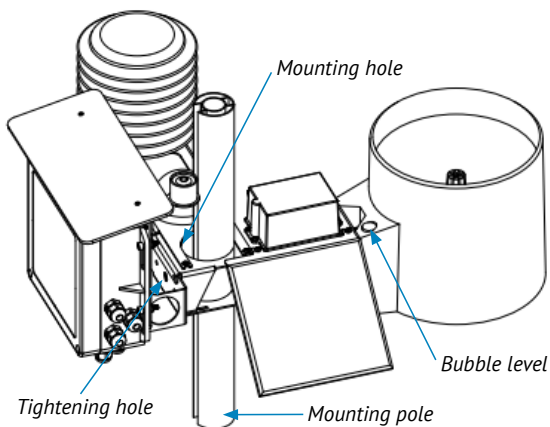
By default, the METOS 5 weather station comes with a disconnected battery and based on your order, it can come with or without the SIM card.

In case the distributor already connected the battery and solar panel and there is an on/off switch on the device, the station can simply be turned on with moving the switch to the **ON** position.

To use mobile network connectivity, you need a micro SIM card provisioned for the correct mobile network type, which is available at the final installation location.

## INSTALLING METOS 5

Before the final installation on the pole, it is advised that the user reads and performs items written in the start-up section of this manual.



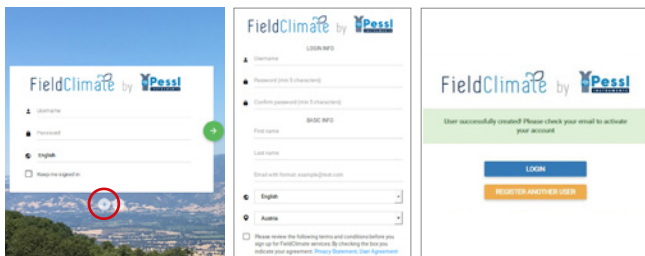
To install the METOS 5, follow these simple steps after firmly inserting the mounting pole into the ground (Ensure the mounting pole is vertical. A level can be used as a guide):

- Pass the mounting hole on the METOS 5 through the mounting pole as indicated above
- Using an m8 screw with the appropriate length, lightly fasten the METOS 5 to the mounting pole
- Adjust the position of the METOS 5 using the bubble level on the rain gauge as a guide by ensuring it is centered
- Tighten the M8 screw securely once the METOS 5 is properly leveled

## USE YOUR METOS 5

To start using services we provide, the weather station needs to successfully communicate with our FieldClimate cloud. After the first data is delivered to the cloud, you need to register on the FieldClimate platform, which gives you access to the transmitted data in graphs or tables. FieldClimate also provides a powerful decision support system for growing your crops (plant protection, irrigation, sowing, harvesting, fertilizing).

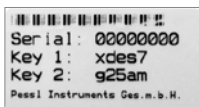
### REGISTER AS A NEW USER ON FieldClimate.com



1. Go to [ng.fieldclimate.com/](https://ng.fieldclimate.com/) and click the button data & e-mail “+”.
2. Insert your personal login and click on the link to activate the user account you created.
3. Check your e-mail and click on the link to activate the user account you created.

### ADD YOUR METOS DEVICE TO YOUR ACCOUNT

1. Locate the sticker with the device serial number and Key1 and Key2 passwords on the product.



*Key 1 gives you full (admin) access and enables you to change all the settings and set up the METOS 5.*

*With Key 2 the user is not allowed to change the station parameters, but can access all the data.*

2. To add your METOS 5 device, click on the icon in the top right corner **User Menu > Add/Remove station**. It will ask you for the **Station Serial number (SN)** and the station key.

**+ Add station**      **- Remove station**

Use the Station ID and key that came with your iMetos station to add it to your list. Use key 1 if you want to be able to change station configuration settings or key 2 if you want read-only access.

Station ID

Station key

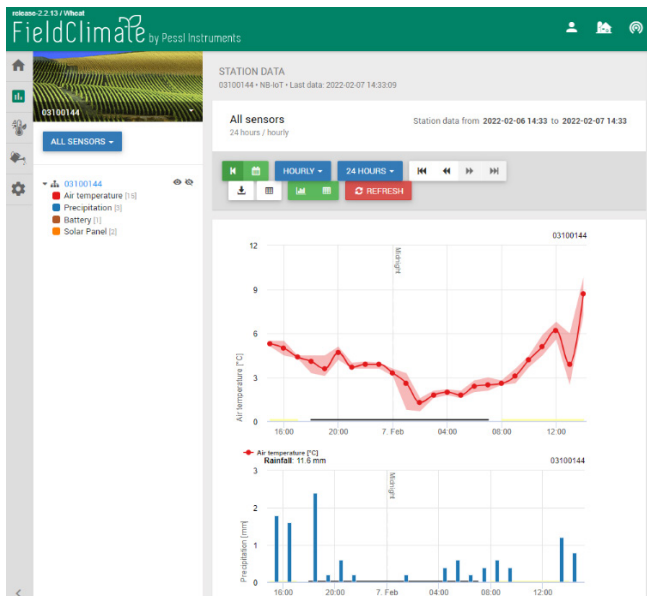
Station name

**ADD STATION**      **CANCEL**

## DASHBOARD, STATION DATA AND SETTINGS

In the new **Dashboard** the user can manage the fast access to the services of highest interest. On the top right corner, Station List allows you to choose among all registered devices.

On the navigation bar, **Station data** page displays the data measured by your device. Data can be viewed in detailed graphs and tables. You can access the structured menu, which allows you to define time series-resolution and export data in a chart/table. On the left side, you can see all sensors connected to your METOS 5.



With the activation of licenses for **localized weather forecast and plant disease models**, it is possible to access all data of these additional services (see figure above). To activate them, contact your local distributor or [license@metos.at](mailto:license@metos.at).

On **Station settings** page you can configure your METOS 5 device.

**Station settings > Sensors and nodes:** You can define a custom name for your station and nodes connected to it. For convenient viewing of data, you can also rename each sensor and customize its color in the graph.

For further inquiries visit [metos.global/fieldclimate-manual](https://metos.global/fieldclimate-manual).

## MAINTAINING THE METOS 5

The weather station should be checked periodically to ensure that sensors are in optimal condition. Regular maintenance is necessary for flawless operation and durability.

At the beginning of the new season, check that the station is working

correctly; data must be transmitted at the set interval to FieldClimate. Keep the solar panel and sensors clean, especially the rain gauge.

Clean rain gauge ensures correct rainfall measurements. It also needs to be leveled by checking the bubble indicator and not obstructed by leaves, insects or debris that could prevent it from functioning properly. Check if the leaf wetness sensor has the appropriate filter paper intact and positioned correctly. When in doubt about the rainfall measurements, the first thing is to check the rain gauge for any debris.

When the solar panel of the METOS 5 is exposed to the sun and gets enough sunlight it should constantly recharge the battery of the system.



### **WARRANTY EXCLUSION FOR BATTERIES, ACCUMULATORS, SUPER CAPACITORS**

Please note that all battery sales are final, and we do not offer any warranty or guarantee for batteries purchased from us. This includes, but is not limited to, defects in materials and workmanship.

The performance and lifespan of batteries can vary based on usage, signal strength, storage conditions, and environmental factors, and as such, we cannot be held responsible for battery failure, reduced performance, or any other issues arising after purchase.

By purchasing batteries, accumulators and super capacitors the customer acknowledges and accepts this exclusion of warranty.

*For full user manual please visit:*  
[metos.global/manuals](https://metos.global/manuals)



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