

# METEOTRACKER WEATHER STATION



## USER MANUAL

Apply to MeteoTracker and MeteoTracker X models

### Quick guide

✓ **Press the button here** to activate the BT advertising. The corresponding green led will blink. In the MeteoTracker X model, the ADV stay on until a second button-press is done.



✓ **Place the weather station** on the car rooftop or externally on other vehicles (see installation guidelines at page 2)

✓ **ATTENTION:**  make sure that the conditions for a safe installation are met (see page 2). If not, do not use the mini-station on moving vehicles

✓ **Enjoy your MeteoTracker session** by starting data acquisition with the MeteoTracker App

✓ **Visualize your sessions** in the “My sessions” list of the MeteoTracker App or go to the **MeteoTracker dashboard** to visualize all the data you collected <http://app.meteotracker.com/#!/en>.

◆◆ FOR DETAILS SEE THE FOLLOWING PAGES ◆◆

# Installation

The mini-station is provided with a 3-magnet base for installation on ferromagnetic surface, like the car rooftop.

## Guideline:

✓ **place** the mini-station so that the air flow enters the two openings in front of the device. Keep the frontal openings perpendicular to the air flow

✓ **make sure** that both sensors are equally exposed to the sun radiation



## SAFETY

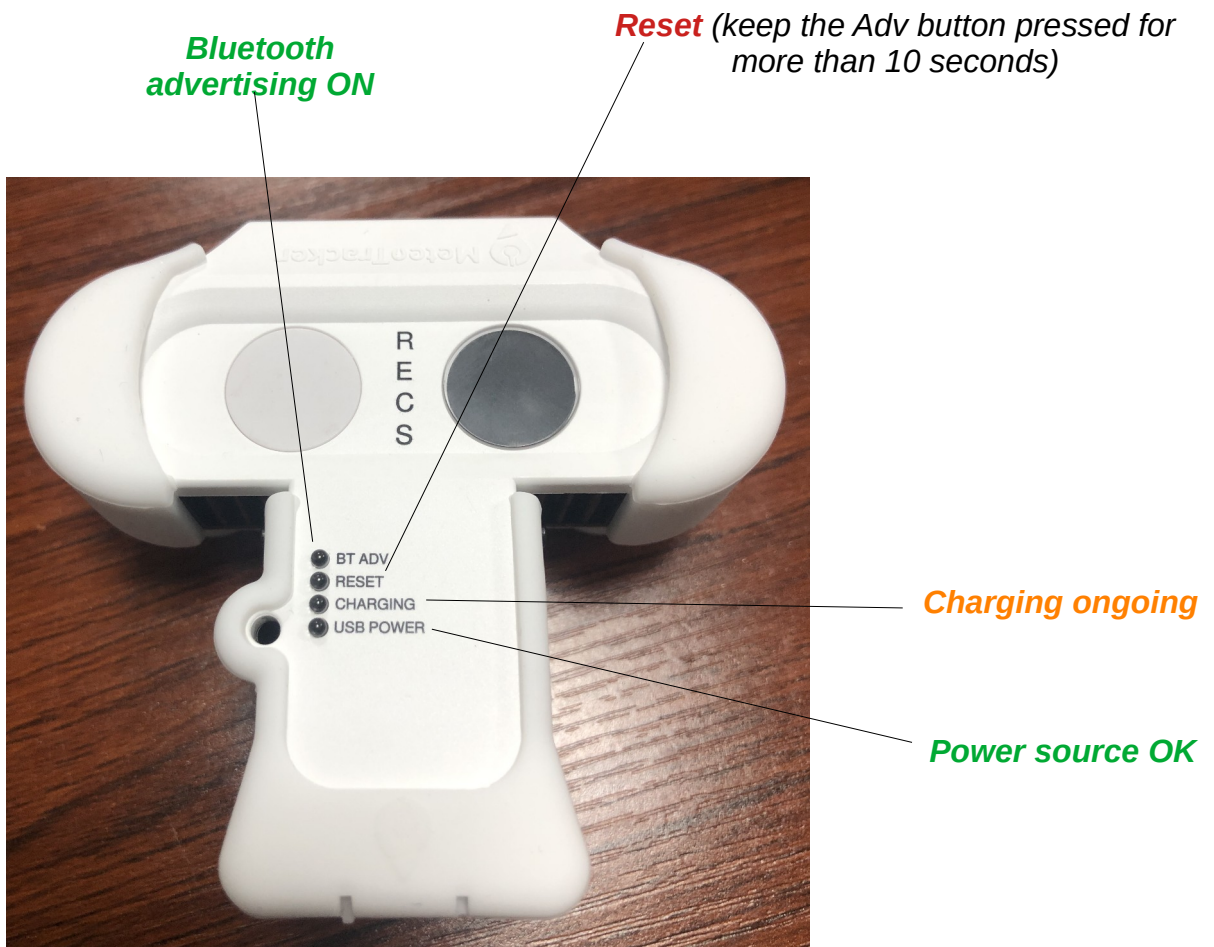
Make sure that the surface where the mini-station is installed:

- is made of ferromagnetic material
- is flat and clean
- no ice or snow is present
- no obstacle or object is present that may reduce the magnetic strength of the 3 magnets placed in the mini-station base
- if all of the above conditions are not met to not or if for other reasons the installation is not safe do not use the mini-station while the vehicle is moving.

**In case of snowfall and/or freezing rain** the abrupt decrease of the friction coefficient may cause wide slip of the device, that may led to its detachment. If such a condition is encountered, the **device must be ensured through a wire** passing through the hole located in the left side of the device (close to the 4 led).



## Device status (LED signalling)



## Battery charging

- ✓ Open the USB-C port in the rear of the device
- ✓ Attach the battery charger through a USB-C cable
- ✓ Charging LED will switch-on
- ✓ When charging is completed, the charging LED will switch-off (charging duration: 2-3 hours)



# Technical specifications and features (1/2)

## 👉 SAMPLING FREQUENCY

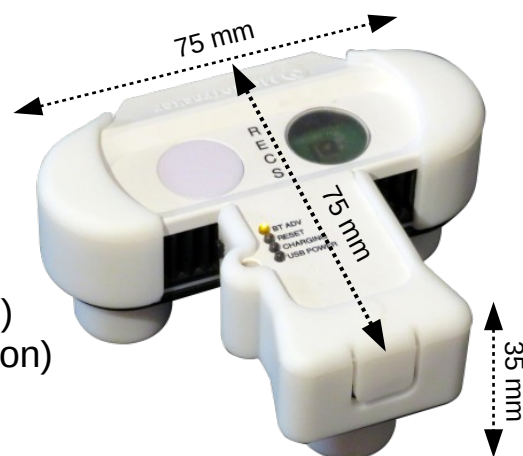
1 sample per second (HW sampling). Acquisition timing set through the MeteoTracker App

## 👉 CONNECTIVITY

- Bluetooth Low Energy
- Cellular by smartphone (Smartphone version)
- Cellular by cellular module (Standalone version)

## 👉 POWER AND INSTALLATION

- Battery life: 250+ hours (rechargeable, 200 mAh)
- Cellular module (standalone version only) power: USB-C plug-in to vehicle power source
- Installation: magnetic base



## 👉 MEASURED PARAMETERS [MeteoTracker X value]

### ✓ Temperature

- ° C or ° F
- accuracy: +/- 0.2° C [0,1° C] (typ, sensors) | +/- 0.5° C [0.4° C] (under solar radiation with speed > 7 km/h --> **patented Radiaton Error Correction System RECS**)
- real-time, maximum, minimum and average values of the session
- operative range: -40° C (-40° F) [-55° C (-67° F)] - +125° C (257° F)
- measurement speed: 15° C variation over a 30 seconds time interval at 20 km/h

### ✓ Relative Humidity

- Accuracy: +/- 3% [1%] [(typ)
- real-time, maximum, minimum and average values of the session
- operative range: from 0% to 100%

### ✓ Pressure

- Accuracy: +/- 0.03 hPa (relative) | +/- 50 Pa (absolute)
- real-time, maximum, minimum and average values of the session

### ✓ Dew-point temperature

- real-time, maximum, minimum and average values of the session

### ✓ Altitude above sea level - QNH

- accuracy: +/- 10 m
- real-time, maximum, minimum and average values of the session

### ✓ Vertical thermal gradient

- real-time, maximum, minimum and average (RMS) values of the session
- algorithm based on detected path slope

### ✓ Solar Radiation Intensity Indicator

- real-time, maximum, minimum and average values of the session



## Technical specifications and features (2/2)

### ☞ DATA VISUALIZATION AND EXPORT

#### **APP** (Android e iOS – smartphone version)

- ✓ real-time visualization on map, graphs and numeric format
- ✓ Archived sessions visualization on map, graphs and numeric format
- ✓ Sessions statistics
- ✓ [MeteoPhoto](#)

#### **Dashboard** (smartphone and standalone version)

- ✓ real-time visualization on map, graphs and numeric format
- ✓ Archived sessions, on map, graphs and numeric format
- ✓ Sessions statistics

#### **Data export and integration on third party platform** (smartphone and standalone version) from dashboard and App (Android)

- ✓ CSV format
- ✓ APIs

### ☞ CERTIFICATION

- CE (ID: HTT202111418) and FCC (ID:2A6AH-MT01)
- IP grade: water-resistant

## References

- ✓ [www.meteotracker.com](http://www.meteotracker.com)
- ✓ [facebook.com/meteotracker](https://facebook.com/meteotracker)
- ✓ [www.linkedin.com/showcase/meteotracker](https://www.linkedin.com/showcase/meteotracker)
- ✓ email: [meteotracker@meteotracker.com](mailto:meteotracker@meteotracker.com)
- ✓ [www.youtube.com/channel/UCioWABj-yL-FeRkACVpjTmQ/videos](https://www.youtube.com/channel/UCioWABj-yL-FeRkACVpjTmQ/videos)