



# Instruction Manual

## MA 10061

**Please read this instruction manual thoroughly to fully understand the features and functions so that you can enjoy the safe and correct operation of this unique product.**

By following the operating instructions, you also avoid damage to the equipment and the risk of voiding warranty rights through misuse.

**The manufacturer and supplier will not be held liable for actions due to failure to comply with this instruction manual or from data inaccuracies that may occur with this product!**

**Pay particular attention to the safety instructions!**

**Keep the manual for further reference!**

### Contents of delivery

- 1 x Gateway
- 1 x AC 20V-Adapter
- 1 x LAN-Cable
- 1 x Thermo-/Hygro-Sensor with 2 x C-batteries
- 1 x Rain gauge with 2 x AA-batteries
- 1 x Wind sensor with solar cell (2 x AAA-batteries built in rechargeable alkaline cells (RAM))
- Mounting material
- Instruction manual

### Usage

- The weather station consists of a gateway with corresponding measuring units (transmitters) that measure weather data such as temperature, humidity, wind speed, wind direction, and rainfall. The data can be accessed via internet from a device with iOS or Android operating systems by using the Mobile-Alerts App.

### Safety Notes:

- The product is designed exclusively for the usage described above. Don't use the product in another way than described in this manual.
- For reasons of safety and operation, alterations to this device are strictly prohibited.



#### **Risk of fatal injury from electric shock**

- Connect the gateway adapter only to a properly installed socket of 230 V.
- Keep the gateway and power adapter away from contact with water or high humidity. Both should only be used in dry, interior spaces.
- Do not use the device if the housing or the cable of the device or the power supply are damaged.
- Store idle equipment out of the reach of children and do not allow persons unfamiliar with the equipment or these instructions to operate the equipment.

- The power wall outlet should be close to the system and easily accessible.
- Remove the plug from the mains, If you are not going to use the device for a longer period of time
- Use the power cord and plug that are included only.
- Place the power cord so that it does not come into contact with sharp or hot objects.



### Caution! Danger of injury:

- Always keep batteries and appliances out of reach of small children.
- Do not recharge, short-circuit, heat, burn or disassemble batteries. Risk of explosion!
- Batteries contain harmful acids. To avoid damage caused by leakage of the battery fluid, replace weak batteries as soon as possible. Never use different types of batteries together or mix old and new batteries. When replacing the leaking batteries wear chemical resistant gloves and safety goggles!

### Important information on product safety!

- Do not expose the device to extreme temperatures, vibration or shock.

## Components



Gateway



MA 10251



MA 10650



MA10660

### Gateway

The gateway is the main unit. It collects all data of the sensor units, which can be accessed via internet from a smartphone or tablet with Mobile-Alerts App on an iOS or Android operating system.

### Sensors

The sensors transmit the readings wireless via radio (868 MHz) within a range of max. 100 m (free field) to the gateway. The included sensors are a temperature/ humidity sensor with repeater function for wind data (MA10251), wind direction / wind speed sensor (MA10660) and a rain gauge (MA10650). It is possible to connect further Mobile-Alerts with the gateway.

### Requirements

The Mobile-Alerts Gateway collects weather data and transmits them to a server. For this purpose, an Internet connection is necessary. You will also need a router with network socket (LAN - RJ45).

To view the weather data you need an internet enabled device (for example, smartphone) with an active Internet connection and the Mobile Alerts App.

## Installation

### Download the App

Download the **MOBILE-ALERTS** app from "Apple App Store" or "Google Play".

### Connect the Gateway

Connect the gateway to power supply using the supplied AC adapter. Connect included LAN cable with the gateway and your router. After about 10 seconds, the Gateway is in operation. The LED will turn static green.

If no DHCP server is available in your network, you can configure the gateway in the app under the point "Settings" manually.

**Important: The Gateway should always be put into operation before starting the sensors!**

## Installation of Sensors

### Setting up the thermo / hygro transmitter

- Pull off the protection cap and open the battery compartment of the temperature sensor and put in 2x C batteries with the correct polarity.
- Close the lid of the battery compartment and replace the protection cap.

### Setting up the rain gauge

- Open the cover of the rain gauge by counter-rotating the base to the lid and then remove the cover.
- Remove the transport securing of the seesaw. The seesaw should be freely moveable forward and backward now.
- Remove the lid of the battery compartment on the bottom of the sensor by loosening the screw.
- Insert 2x AA batteries with correct polarity and close the lid of the battery compartment by tightening the screw.

### Setting up the wind sensor

- Remove the protective film from the solar panel
- Press the reset button on the bottom of the sensor using the supplied plastic rod

### Add sensors

- Open the app, dashboard is displayed.
- The sensors with the prefix "Sample" are only for demonstration purposes and can be deleted.
- Tap "Add new sensor" and scan the QR code on the back or bottom of the temperature sensor.
- Then set a name for the sensor. To set a name, select the transmitter and then tap on the left area of the pencil icon in the upper right.
- Confirm the name by pressing the Enter button, then tap Back.

### Read measurements

- Now you can read the measurements on your mobile phone.
- For more information on using the app and sensor-specific settings can be found in the app under "Info".

## Mounting Sensors

Below we will give you instructions for placement and mounting of the measuring units:

- Ensure that all of the sensor data can be received by the gateway at the intended mounting locations. Trees, metal surfaces, walls and electronic devices can interfere with transmission.
- Please check whether the stations are accessible for cleaning and maintenance easy too.
- The sensors should be cleaned regularly, as dirt residues can affect the measurements.

## Placing the thermo-/ humidity-sensor outdoors

- This sensor has a repeater function for wind data. Signals received from the wind sensor are forwarded to the gateway. Position the sensor between wind sensor and gateway, in case that the wind sensor signals can not be received directly from the gateway.
- The thermo / humidity transmitter should be placed in an area with free air circulation and protected from direct sunlight and extreme weather conditions.
- Place the sensor in a shady spot or under a roof, if possible.
- If you attach the transmitter to a vertical surface, use the wall mount or another suitable mount.
- Do not place the transmitter near heat sources, such as a chimney
- Also avoid areas that produce heat or reflect or that are heated by the sun, such as metal, concrete, paving stones, porches or wooden terraces.
- The best results can be achieved if the sensor is mounted on a natural surface ( for example on grass)
- The international standard for height measurement of air temperature is 1.25 m (4 feet) above the ground.

## Placing the rain gauge outdoors

- Place the rain gauge in an area where the rain may fall into the container, ideally about 60 to 90 cm above the ground on a small pedestal.
- The rain gauge should be installed in an open area and free of walls, hedges, trees or other elements that reduce either the amount of rain, or cause that more than actually falling rainfall is absorbed by the rain gauge .
- Trees and rooftops may cause soiling, which can lead to failure of the rain gauge.
- To avoid the effects of a rain shadow, you should attach the instrument at a distance of about 3 m to the nearest obstacle.
- In addition, is particularly important that rain water can freely drain from the rain gauge. Always make sure that at the bottom of the unit does not accumulate water.
- The mechanism of the rain gauge operates with a magnet. Therefore please do not place magnetic objects near the device.

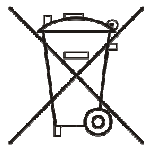
## Placing the wind sensor outdoors

- Make sure that the wind can blow freely around the anemometer and is not impaired by nearby buildings, trees or other obstructions.
- To achieve the best results, place the anemometer ideally 3 feet above all possible obstacles. The floor under the unit causes wind friction and thus reduces the measurement results.
- Mount the anemometer so that he is exposed as much as possible to the normal wind conditions in your area.
- The official mounting location for anemometers is 10 m above ground level in a clear unobstructed location.
- Place the anemometer preferably on a pole or on a vertical surface.
- In order that the station can display the correct wind direction, the wind sensor has to be (the solar panel) mounted in south orientation with its front side (the solar panel). If necessary, use a compass to calibrate the wind direction.

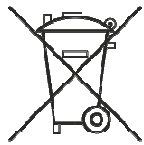
## Care and maintenance

- When cleaning the display and casings, use a soft damp cloth only. Do not use solvents or scouring agents as they may mark the LCD and casings.
- Remove batteries if the devices are not in use for a longer time.
- The sensors should be cleaned regularly, as dirt residues and cobwebs can affect the measurements.
- The rain gauge is prone to clogging due to its funnel shape. Check and clean the rain gauge periodically to ensure accurate measurement of precipitation.
- Remove the cover of the device. Remove any dirt, leaves or debris by cleaning the items with a slightly damp cloth.
- Clean small parts and holes with a cotton swab or a pipe cleaner
- Clean the seesaw with a slightly damp cloth.

## Recycling



Old batteries do not belong into general household waste because they could cause damages of health and environment. You can return used batteries free of charge to your dealer and collection points. As end-user you are obliged by law to bring back used batteries to distributors and other collecting points!



This symbol signifies that you must dispose electrical devices separately from the general household waste when it reaches the end of its useful life. Take your electronic to your local waste collection point or recycling centre. This applies to all countries of the European Union, and to other European countries with a separate waste collection system.

## EU-Declaration of Conformity

R&TTE Directive 1999/5/EC

Summary of the Declaration of Conformity : We hereby declare that this wireless transmission device does comply with the essential requirements of R&TTE Directive 1999/5/EC. The complete Declaration of Conformity can be found here: [www.mobile-alerts.eu/technoline/doc](http://www.mobile-alerts.eu/technoline/doc)

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## Technical Data

### Gateway:

Reception frequency: 868 MHz  
Power supply: 20V - 80mA AC

### Thermo-/ humidity-sensor with repeater function (MA10251):

Measuring range temperature: -39.9°C to +59,9°C  
Accuracy: +/- 1°C  
Measuring range humidity: 20% to 99% rF  
Accuracy: +/- 3% rF  
Transmission frequency: 868 MHz  
Transmission Range: up to 100 meters (open area)  
Power supply: 2 x C-batteries

### Rain gauge (MA 10650):

Measuring range: 0,0 mm – 300,0 mm/h  
Resolution: 0,25 mm  
Transmission frequency: 868 MHz  
Transmission Range: up to 100 meters (open area)  
Power supply: 2 x AA-batteries

### Wind sensor (MA 10660):

Measuring range: 0 – 50 ms (0-180 km/h, 0-97 knots, 0-112 mp/h)  
Accuracy: +-5%, +/-0.5m/s  
Directions: 16  
Resolution directions: 22.5°  
Transmission frequency: 868 MHz  
Transmission Range: up to 100 meters (open area)  
Power supply:: Solar panel (2 x AAA-batteries rechargeable alkaline (RAM) built-in)