WMS Weather station plus

Operating and installation instructions

Valid from date 1 March 2026
Please keep for future use.

warema
Der SonnenLichtManager

General information



Fig. 1: WMS Weather station plus

1 Heated sensor surface (precipitation sensor)
2 Photodiodes (photo sensor)
3 Wind current sensor (wind sensor)
4 Temperature sensor (temperature sensor)
5 Joint
6 Mounting plate with cover. The connection for the weather station power supply is found under the cover.

The WMS Weather station plus enables the wireless control of sun shading drives and is equipped with sensors for brightness, precipitation, temperature and wind speed. The weather station is supplied with mains voltage. The device transmits weather data to WMS-compatible receivers. The product is compatible with the homee Smart Home system.

Intended use

This product is an electronic device intended for the following use:

– Control WMS receivers

The approval of the manufacturer must be obtained for uses outside of the purposes listed in these instructions.

Safety instructions

WARNING
In accordance with VDE 0100 and/or the legal requirements and standards of the country in which the device is being installed, the electrical installation (assembly)/dismantling must be carried out by a certified electrician. The electrician must observe the installation notes and instructions included with the electrical devices supplied.

WARNING
If hazard-free operation cannot be assumed, the device may not be started or must be deactivated. This assumption is justified if

- ▶ the housing or the connecting lines show signs of damage.
- ▶ the device is no longer working.

WARNING
An automatically controlled mechanism may begin to move unexpectedly!

- Therefore, never place any objects in the area of movement of an automatically controlled mechanism!
- Disconnect the power supply of the controlled sun shading products before maintaining or cleaning the products.

Installation

This device is designed for surface installation on a building facade. The device can also be mounted on a pole using the included cable ties.

Included fixing materials:

- 2 screws 4.5 × 40 mm incl. screw anchors 6 mm
- 2 Spacers for wall and ceiling installation (Fig. 4)
- 2 steel cable ties 360 mm

- Use suitable fixing materials only
- Do not remove the protective cap of the wind current sensor until the device is fully installed.

Important information on the installation location

- Install the device outdoors at a readily accessible, raised location.
- Metal-clad buildings, domestic interference sources (unshielded household appliances, television sets, computers), supply lines and metallic objects such as sheet metal enclosures must have a distance of at least 0.5 m from the weather station.
- Install the device so that the wind current sensor is as horizontal as possible (housing inclination of 15°). When installing the device on sloped areas, it can be positioned horizontally using the joint (Fig. 1).
- When selecting an installation location, ensure that precipitation can fall onto the sensor surface from all directions without being obstructed.
- Before installation, consider whether trees, bushes or parts of buildings could shade the weather station during the course of the day. In this case, the weather station cannot provide accurate measuring values, and the measurement result will be distorted.
- When selecting the installation location, ensure that the weather station is exposed to the same light conditions as the sun shading system to be controlled. This means that you must align the photodiodes according to the building facades being shaded. Ideally, the weather station should be aligned in the same direction as the sun shading product being controlled.
- Install the device near, but not in the slipstream of the sun shading system, otherwise the correct wind evaluation cannot be ensured.

Mounting plate

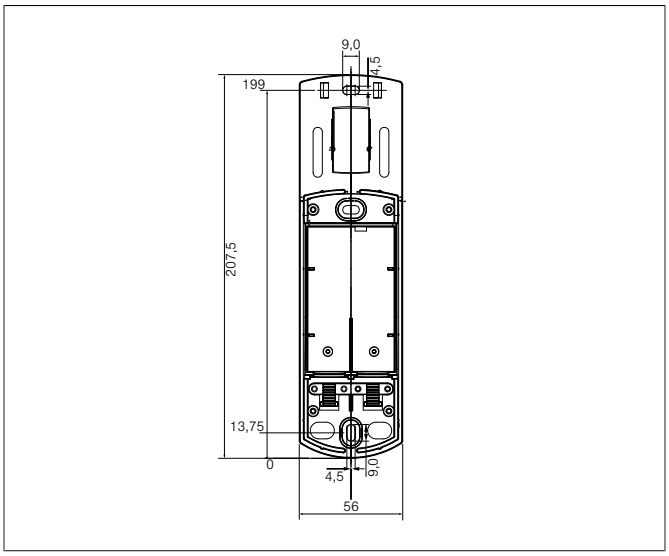


Fig. 2: Dimensions

Wall installation

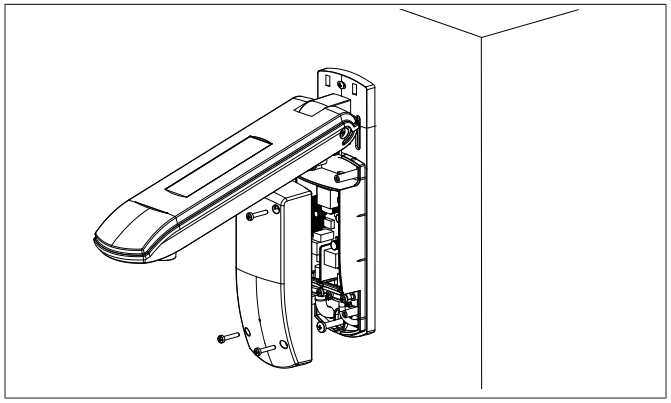


Fig. 3: Wall installation

- Clip one of the included spacers into the threaded hole (horizontally or vertically, (Fig. 4).
- Attach the weather station to a suitable substructure using the screws and screw anchors provided, as shown in the illustration (Fig. 3).
  The connecting line must be correctly positioned in the guide on the back of the mounting plate to prevent it from becoming trapped during installation.
- Tighten the screw on the joint.

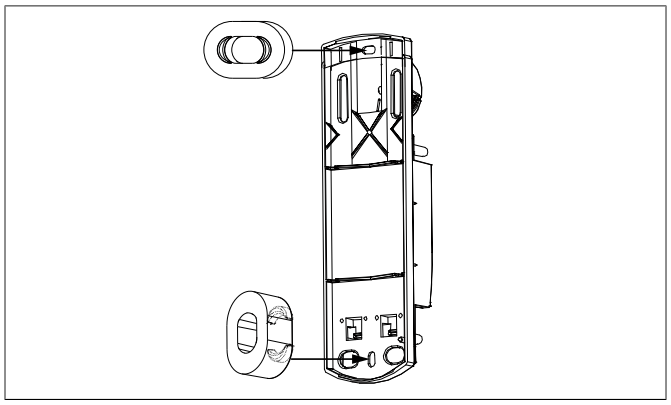


Fig. 4: Clipping the separate spacers into the threaded hole

Ceiling installation

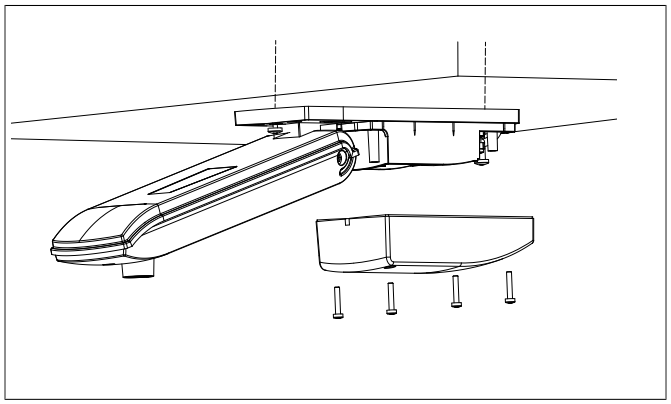


Fig. 5: Ceiling installation

- Loosen the screw on the joint of the weather station.
- Clip one of the included spacers into the threaded hole (horizontally or vertically, (Fig. 4).
- Attach the weather station to a suitable substructure using the screws and screw anchors provided, as shown in the illustration (Fig. 5).
  The connecting line must be correctly positioned in the guide on the back of the mounting plate to prevent it from becoming trapped during installation.
- Swing the mounting plate of the weather station upwards by 90° (or the necessary angle).
- Retighten the screw on the joint.

Pole installation

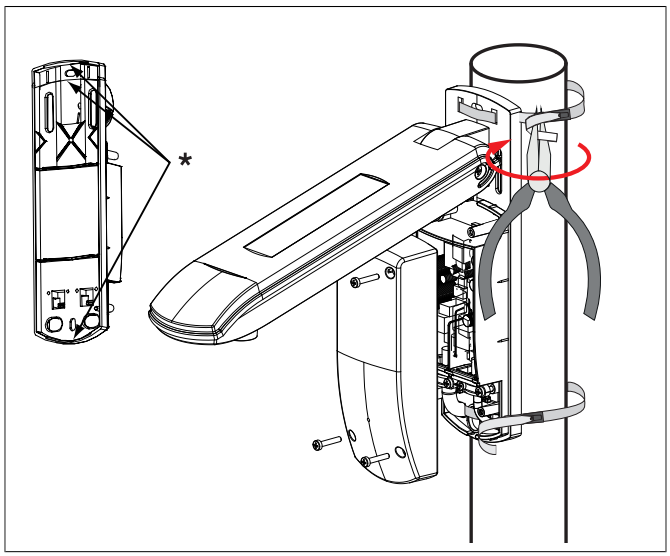


Fig. 6: Pole installation and steel cable tie locking mechanism

- Remove the thin (triangular) webs at the top and bottom edge of the mounting plate using wire cutters (Fig. 6)
- Guide the included steel cable ties through the mounting plate openings as shown. The cable tie closures must face outwards.
- Attach the weather station to a securely mounted pole, ensuring correct alignment. Lines must not be pinched.
- Turn both ends of the cable tie inwards, one at a time, using needle-nosed pliers. Check that the weather station cannot be turned.
- Retighten the screw on the joint.

Connection

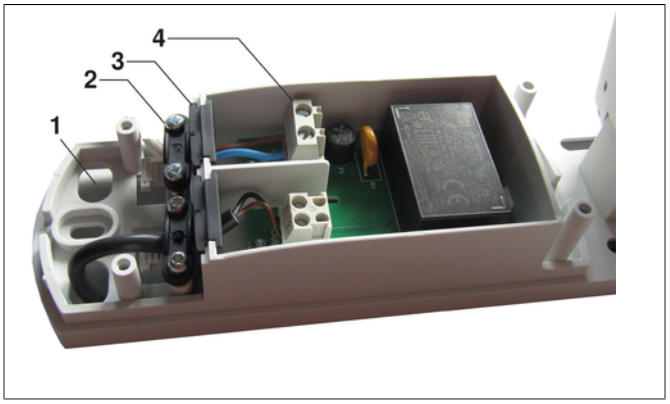


Fig. 7: Connecting the weather station

1 Cable conduit
2 Strain relief
3 Rubber seal
4 Connection terminals

The weather station is supplied with mains voltage.

An on-site overload current protection device (fuse) and a disconnecting and isolating switch to switch off the entire system must be provided.

- Route the line in such a way that water cannot flow into the device.
- Use a line that is approved for the operating voltage and is resistant to weather and UV radiation (suitable for outdoor use)!
- If the line leads directly from the wall through the cable conduit (1) into the device, you can also use an NYM 3x1.5 mm2.
- Guide the line through the cable conduit (1) and rubber seal (3) into the housing. Secure the line with the strain relief (2).
- Connect the wires to the connection terminals (4). Observe the inscriptions on the terminals.

You can also guide a surface mounted line into the housing directly from below. Make an opening in the cover of the mounting plate for this. The intended position is thinned out on the inside of the cover.

Commissioning

Initial operation

Further information and help, such as video tutorials and the WMS practical handbook, can be found on our support page
www.warema.com/funksysteme-support
We recommend commissioning using the WMS studio pro or homee PC software.

- Switch the mains voltage on.
- Learn the sensor into the receiver (see WMS practical handbook, art. no. 2020426).
- After this, the device is ready for operation and transmits weather data to the WMS network at regular intervals.

Operating elements



Fig. 8: Operating elements, view from below

Item	Function		Result
1	Green status LED 2 LED 2	▶	Indicates different states of the weather station using different flash patterns
2	Red status LED 1 LED 1	▶	Indicates different states of the weather station using different flash patterns
3	Learn button L	▶	Assigns the weather station to a channel or deletes the weather station from a channel
4	Test button T	▶	Sends a test report to the WMS network

Resetting the weather station

When you delete sensors from the network, they are deleted from all accessible receivers in the network. However, the control functions of the receivers remain active and must be deactivated separately for each receiver.

Press the L and T buttons on the WMS weather station simultaneously for 10 s	➡	LED 1 LED 2 Both LEDs on the sensor flash five times

Checking the sensor allocation

The weather station transmits a test report to the network at the push of a button.

Check communication: Briefly press the T button on the sensor Repeat until all sensors in the channel have been checked	➡	LED 2 LED 2 flashes green.
	➡	The receivers allocated to the sensor wave.
	➡	One or more devices do not wave: ▶ Radio link exists but there is an error in the sensor allocation ▶ Radio link to device interrupted

Check the power supply

Briefly press the L or T button on the WMS weather station	➡	LED 2 The green LED lights up for 5 °s if the charging status of the weather station is sufficient.

Maintenance

Strong vibrations at the installation location (e.g. from frequent high wind loads) can loosen the fixing screws. If the joint screw is not properly tightened, the alignment of the weather station may change as well.

- Therefore, check from time to time that the weather station is still firmly installed and that all screws are sufficiently tight.

Cleaning

The weather station must be regularly inspected for soiling (e.g. bird droppings) and cleaned carefully.

- Clean the housing with a soft, damp cloth. Do not use detergents or cleaning agents, solvents, foaming substances or steam and high pressure washers!
- Photodiodes or must always be free of dirt to avoid incorrect measuring values and to ensure operating reliability.
- Sensor surfaces must always be free from soiling to avoid incorrect measuring values and to ensure operational reliability.
- In case of snowfall, check daily whether the photodiodes are free of snow.
- A product covered in snow may malfunction. If the energy in the buffer is depleted, the product will fail completely. Only when the batteries have been recharged via the solar panel will the product resume normal operation.
- The product may ice over in extreme weather conditions. To prevent damage, take the control systems out of operation until wind monitoring can be resumed.
- Never remove firmly attached layers of ice and snow. Scratching, heat and chemical antifreeze agents may damage the product.

Liability

Failure to comply with the product information in these instructions if the product is used for purposes other than those intended, or if the product is not used in accordance with its intended use may result in the manufacturer refusing to accept warranty claims for damage to the product. In this case, liability for secondary harm to persons or damage to property will also be excluded. Follow the instructions in the operating manual of your sun shading system.

Automatic or manual operation of the sun shading system when icing over as well as using the sun shading system during inclement weather can cause damages and must be prevented by the operator through suitable precautions.

Obligations for the disposal of electrical devices



A marking with this symbol indicates the following obligations under the scope of legal regulations:

- The owner of this electrical device must dispose of it and its packaging separately from unsorted municipal waste for further recycling.
- Used batteries and accumulators that are not enclosed in the old device, as well as lamps/bulbs that can be removed from the old device without breaking, must be disposed of separately.
- Distributors of electrical devices and disposal companies are obliged to take back the equipment free of charge.
- The owner is responsible for deleting any personal data contained on the electrical device prior to disposal.

Technical data

WMS Weather station plus	min.	typ.	max.	Unit
Supply				
Operating voltage	85	230	253	V AC
Frequency		50	60	Hz
Power consumption			3.0	W
HF transceiver				
Transmission frequency	2.40		2.48	GHz
Transmission power			10	dBm
Reception sensitivity		-101		dBm
Operating range (environment without interference)		30		m
Readings				
Wind speed (intervals 0.5 m/s)	0		25	m/s
Brightness (intervals 0.5 klx)	0		100	klx
Dawn/dusk (intervals 2 lx)	0		500	lx
Temperature* (intervals 0.5 °C)	-20		60	°C
Precipitation				Yes/no
Housing				
Dimensions in mm (LxWxH)				248 x 59 x 207 mm
Degree of protection				IP43
Safety class				II
Miscellaneous				
Conformity can be viewed at www.warema.de/ce				CE
The device meets the EMC directives for use in residential and commercial areas.				
WAREMA Renkhoff SE hereby declares that the radio system type WMS Weather station plus complies with Directive 2014/53/EU.				
Ambient conditions				
Operating and storage temperature	-20		60	°C
Humidity (not condensing)	10	40	100	%RH
Degree of soiling				2
Article numbers				
WMS Weather station plus				2089595
WMS Weather station plus anthracite				2169779
WAREMA Renkhoff SE, Hans-Wilhelm-Renkhoff Str. 2 97828 Marktheidenfeld, Germany / www.warema.com				

***Measuring value temperature**

To obtain correct measurement values with high accuracy, the weather station must be installed in direct sunlight. During strong solar radiation, the temperature value may therefore deviate from other thermometers measuring temperatures in the shade. This deviation has no effect when you use the ice monitoring function in a network user.

Depending on the installation location and varying amounts of solar radiation, measurement tolerances of up to ± 5°C can be expected.

Troubleshooting the WMS Weather station plus

Type of malfunction	Possible cause	Remedy
When a button is pressed on the weather station, no LED lights up	The operating voltage of the weather station is off	Switch on the mains voltage
The sun shading system does not wave when the T button is pressed (green LED flashes three times)	No operating voltage at the receiver	Switch on the mains voltage
	The weather station has not been assigned to the receiver.	Assign the weather station to the channel of the receiver (see "Assigning the weather station to a channel").
	Waving depends on the software version of the particular receiver. Receivers belonging to the first model series do not wave yet, despite having received the delete command.	Receiver newer than date XX/XXXX
During operation via the transmitter, the sun shading system only moves down briefly and then moves back up	A wind alarm has been triggered	Wait until the wind alarm is cleared. Then repeat the move command
The sun shading system raises even in low winds.	The wind speed limit is set too low	Set the correct wind speed limit after consulting a specialised retailer. The wind speed limit depends on the most wind-sensitive product controlled by the weather station.
The sun shading system does not raise in high winds	The wind speed limit is set too high	Lower the wind speed limit
	The weather station is installed in an area protected against the wind	Check the installation location
The sun shading system does not lower in sunshine	The brightness limit value is set too high	Decrease the value incrementally.
The sun shading system does not raise in cloudy weather	The brightness limit value is set too low	Increase the value incrementally
The sun shading system does not move up during precipitation	Precipitation monitoring is switched off	Switch on precipitation monitoring for the channel of the receiver
The sun shading system retracts although there is no precipitation	The sensor surface of the precipitation sensor is dirty or has become wet due to factors that are not weather related (e.g. bird droppings, spayed water)	Clean the sensor surface (see section "The weather station must be regularly inspected for soiling (e.g. bird droppings) and cleaned carefully.")
The sun shading system unexpectedly raises for no apparent reason	The operating voltage of the weather station failed or the weather station cannot be received. The sun shading system is raised for safety reasons	Switch on the mains voltage, check the installation situation
	No communication between the weather station and the sun shading system or the WMS receiver (interference from unrelated transmitters or device faulty)	Switch off unrelated transmitters, check that the device is functioning properly
The sun shading system can only be lowered in stages and stops after five seconds	The operating voltage of the weather station failed or the weather station cannot be received. The sun shading system cannot be operated normally until the weather station is received again	Switch on the mains voltage, check the installation situation
Move commands of the weather station are executed only sporadically	Interference caused by another transmitter	Deactivate unrelated transmitters
	There are reinforced concrete covers or steel-reinforced concrete walls between the weather station and receiver	Reduce the distance to the receiver
The sun shading system does not respond to the wind information of the weather station	If the weather station is assigned to a WMS receiver that has already been combined with a WMS wind sensor (e.g. for patio awnings), this receiver only evaluates the wind information of the WMS wind sensor.	The WMS Wind sensor is always only responsible for the wind monitoring. Other wind information is ignored by the WMS receiver. However, all other weather data from the weather station can be evaluated normally by this receiver.