

**USER MANUAL** 

8141.62

Sensor Shelter





### Function and description

Sensor shelters are used to protect temperature and humidity measuring instruments against unmeant influences of the weather when effecting measurements in the open air. Thus, the determined results of measurement are independent of precipitation and their evaporation as well as of direct and indirect radiation. The measuring results are safe and will be comparable.

Constructionally sensor shelters are in such a way arranged that the data acquisition area of the installed sensor are located in the middle of the shelter. Additionally the three upper lamellae are closed for thermal insulation purpose. Thus optimal measuring conditions are ensured. The plastic lamellae are arranged in a defined distance, one above the other. By the special lamella design the protection of the sensor against unmeant influences is extremely effective.

For improvement of ventilation the lowest lamella has a bigger inner diameter of 73 mm. Furthermore the holder at this place has special tapers and openings which optimise the ventilation and prevent fluid retentions. The sensors are placed from below into the opening of the shelter and fixed by a clamping screw. The clamp screw is placed inside the weather shelter which causes a significantly improved stability of the complete shelter (incl. sensor). The sensor shelters can be installed on vertical and horizontal masts or tubes.

### **Benefits**

- Natural ventilation of the sensors
- Improved lamellar system
- Suitable protection against direct and indirect radiation
- Protection against weather influences
- · Simple and quick mounting on tubes

### Warranty

Please note the loss of warranty and non-liability by unauthorized manipulation of the system. You need a written permission of the LAMBRECHT meteo GmbH for changes of system components. These activities must be operated by a qualified technician.

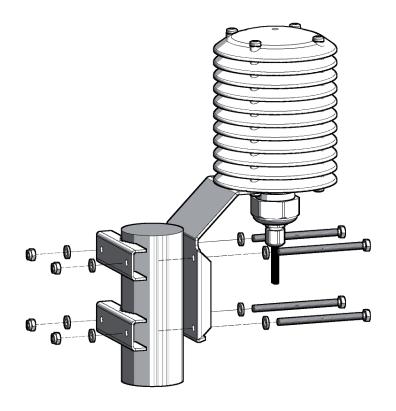
The warranty does not cover:

- 1. Mechanical damages caused by external impacts (e.g. icefall, rockfall, vandalism).
- 2. Impacts or damages caused by over-voltages or electromagnetic fields which are beyond the standards and specifications in the technical data.
- 3. Damages caused by improper handling, e. g. by wrong tools, incorrect installation, incorrect electrical installation (false polarity) etc.
- 4. Damages which are caused by using the device beyond the specified operation conditions.

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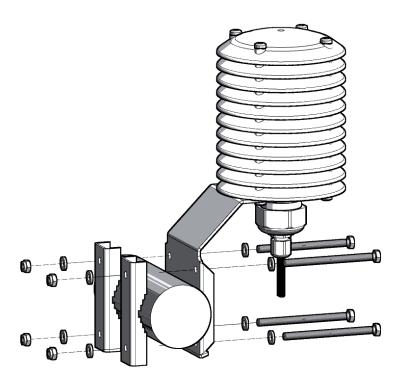


### Installation of the shelter at a vertical mast or tube



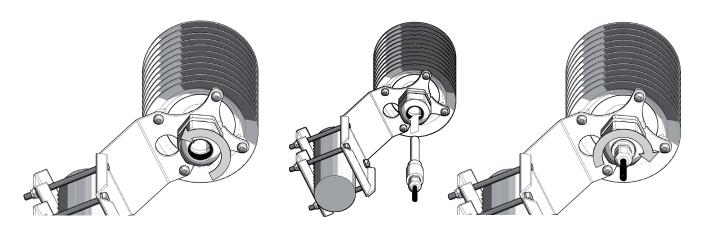
Needed tools: 2xwrench SW10

### Installation of the shelter at a horizontal mast or tube



Needed tools: 2xwrench SW10

## Mounting the sensor in the shelter



# Cleaning of the sensor shelter

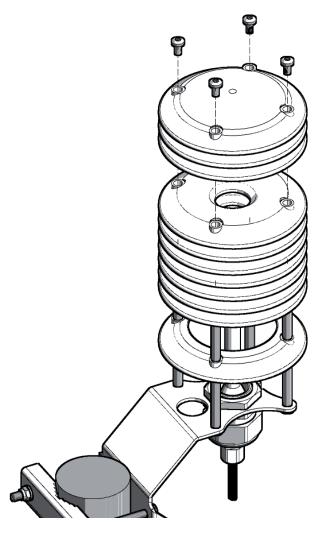
The cleaning of the shelter is very easy. It can be done with common household detergents.

The shelter can be disassembled for this procedure. For this the four upper screws just need to be unscrewed and the lamellas need to be pulled up. The lamellas can be cleaned with a wet cloth. After cleaning the lamellas will be slipped onto the four pillars and fixed with four screws.

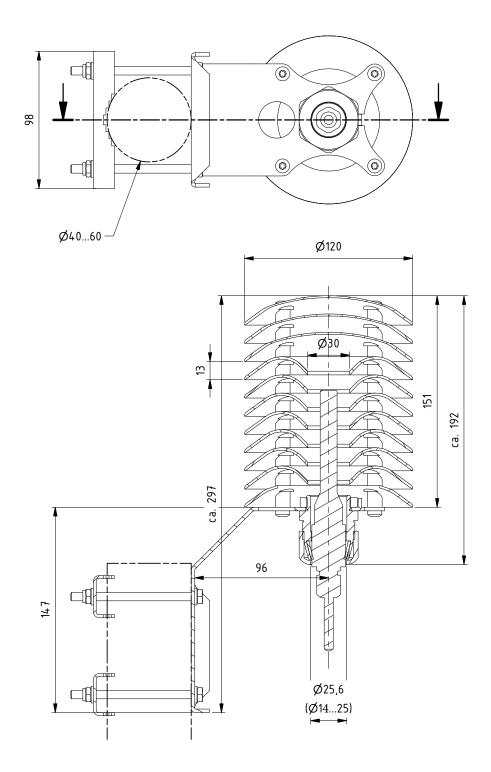


We recommend securing the screws with locking varnish or something similar after loosening them once.

Furthermore it is possible to clean the shelter (without sensor) in a standard dishwasher. Due to our experiences the hydrophobic features of the plastic surface will be strengthened after the shelter was cleaned inside a dishwasher.



## Dimensioned drawing



### Technical data

ID 00.08141.620000 Sensor Shelter (8141.62)

Range of application: -50...+80 °C

Amount of lamellas: 11 (3 lamellas closed, 7 lamellas normal, 1 lamella with 73 mm diameter opening)

Dimensions: Diameter = 120 mm, height = approx. 297 mm (incl. holder)

For mast diameter: 40...60 mm Screwing for sensor Ø: 14...21 mm

Weight: < 535 g without holder (weight of the holder: < 545 g)

Material: Lamellas made of UV resistant plastic material, UL flammability rating HB

Holder made of V4A stainless steel, white powder-coated RAL 9003

<u>Further accessories:</u> Screwing for sensor Ø 10...15 mm · screwing for sensor Ø 18...25 mm

(please order separately) Adapter for sensor diameter 5 mm

### Disposal

LAMBRECHT meteo GmbH is listed and registered at the Stiftung Elektro-Altgeräte Register ear under:

WEEE-Reg.-Nr. DE 45445814

In the category of monitoring and control instruments, device type: "Monitoring and control instruments for exclusively commercial use".

#### Within the EU



The device has to be disposed according to the European Directives 2002/96/EC and 2003/108/EC (Waste Electrical and Electronic Equipment). Do not dispose the old device in the household waste! For an environmentally friendly recycling and disposal of your old device, contact a certified disposal company for electronic waste.

### Outside the EU

Please follow the regulations in your country regarding the appropriate disposal of waste electronic equipment.

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