

# Radiation Shield COMETEO

innovative design for better protection  
and more accurate measurement



- naturally ventilated COMETEO
- actively ventilated COMETEO
- solution for agriculture





## Available types of COMETEO

**COMETEO** multiplate radiation shield is used to protect measuring devices and provides more accurate measurement results. The shield minimizes radiation reaching the sensor, minimizes radiation absorbed by the shield and maximizes ambient air flow around the sensor. The enlarged top plate „cap” is 210 mm in diameter and designed to provide shade for high solar angles for lower plates and also for full protection of measuring device placed underneath.

Compact size, light weight and resistant plastic materials make this shield useful for many applications. Our solution can be used in agriculture, horticulture and forestry - monitoring the conditions of growth in fields, greenhouses, growth chambers and other places where it is important to monitor the temperature and other quantities.

**COMETEO** is made of ASA plastic which is resistant to mechanical damage and UV radiation. ASA plastic is very stable over time.

**F8110** - naturally ventilated

New design and material of plates for high reflectivity, low thermal conductivity, and maximum weather resistance.

A cable gland for installation of external probes.

Advanced weather protection by maximized top cover area.

Measuring device entirely protected inside the shield.

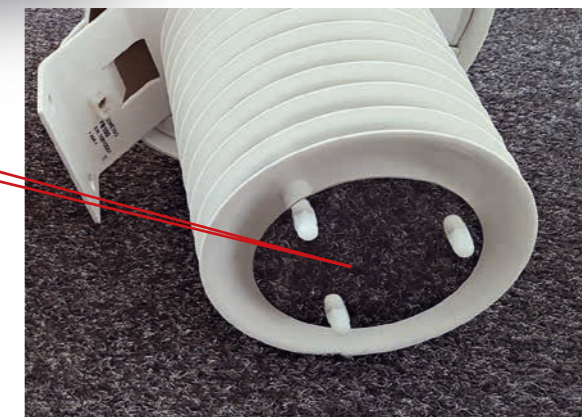
**F8100** - naturally ventilated  
**F8200** - actively ventilated

Built-in fan for active ventilation requires external 12 Vdc (F8200).

Passively ventilated requires no power.

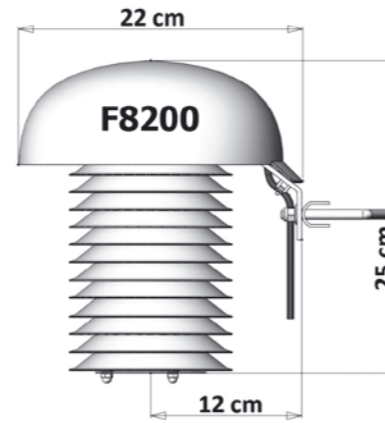
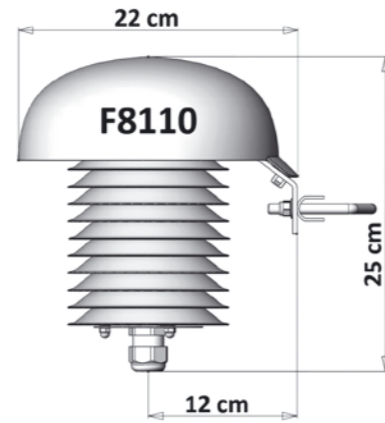
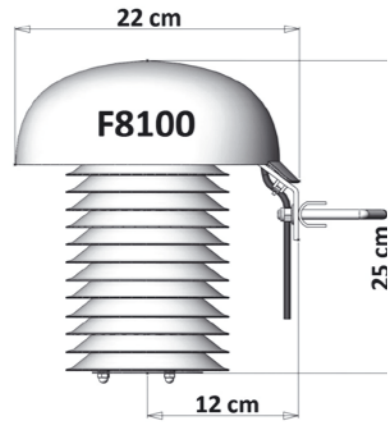
Prevention of condensation by downward sensor orientation.

A mirror to eliminate the reflection of rays from snow or desert sand.



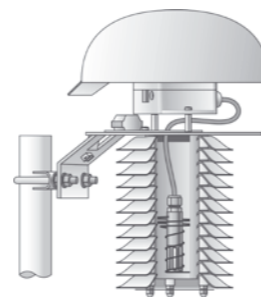
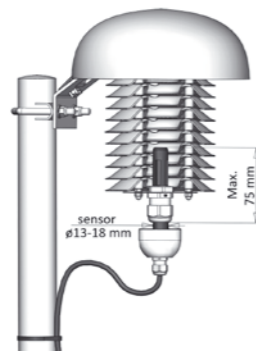
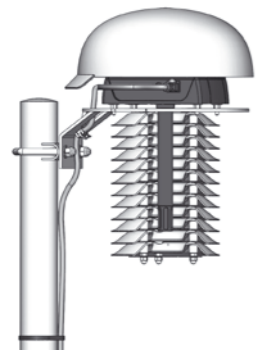


# Available types of COMETEO



naturally ventilated

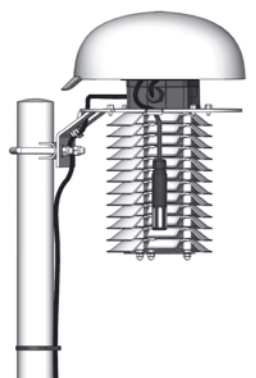
actively ventilated



Can be used together with temperature and humidity sensors with cable gland and LCD display positioned perpendicular to stem such types T3113D, T0213D, T3413D or T7613D.

Radiation and weather shelter F8110 is designed for the protection of any meteo sensor with a diameter of 13 to 18 mm.

Can be used together with temperature and humidity dataloggers and sensors with external probe on the cable.



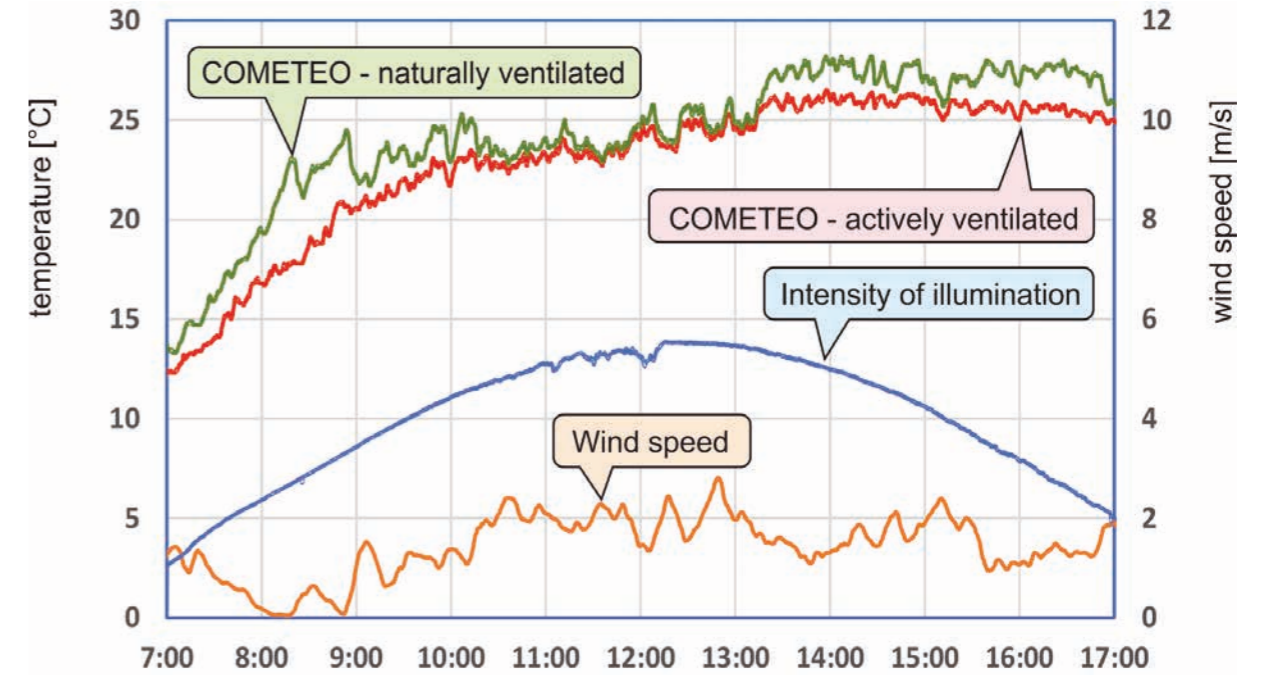
Can be used together with temperature and humidity dataloggers, sensors or regulators with external probe on the cable such:

- » Dataloggers S3121, R3121, UxxxxM
- » Sensors T7311, T3319, T7411, T7511, T3511, T3611
- » Regulators H3021, H3061, H3331, H3431, H3531, H7531

Naturally ventilated COMETEO F8100 and F8110 are especially suitable for windy areas for better natural ventilation and accurate measurement. It does not require powering.

Actively ventilated COMETEO F8200 is especially suitable with low airflow and no wind areas. It requires powering 12Vdc.

Picture below shows a comparison between naturally and actively ventilated COMETEO.



Mounting of sensor inside of COMETEO.



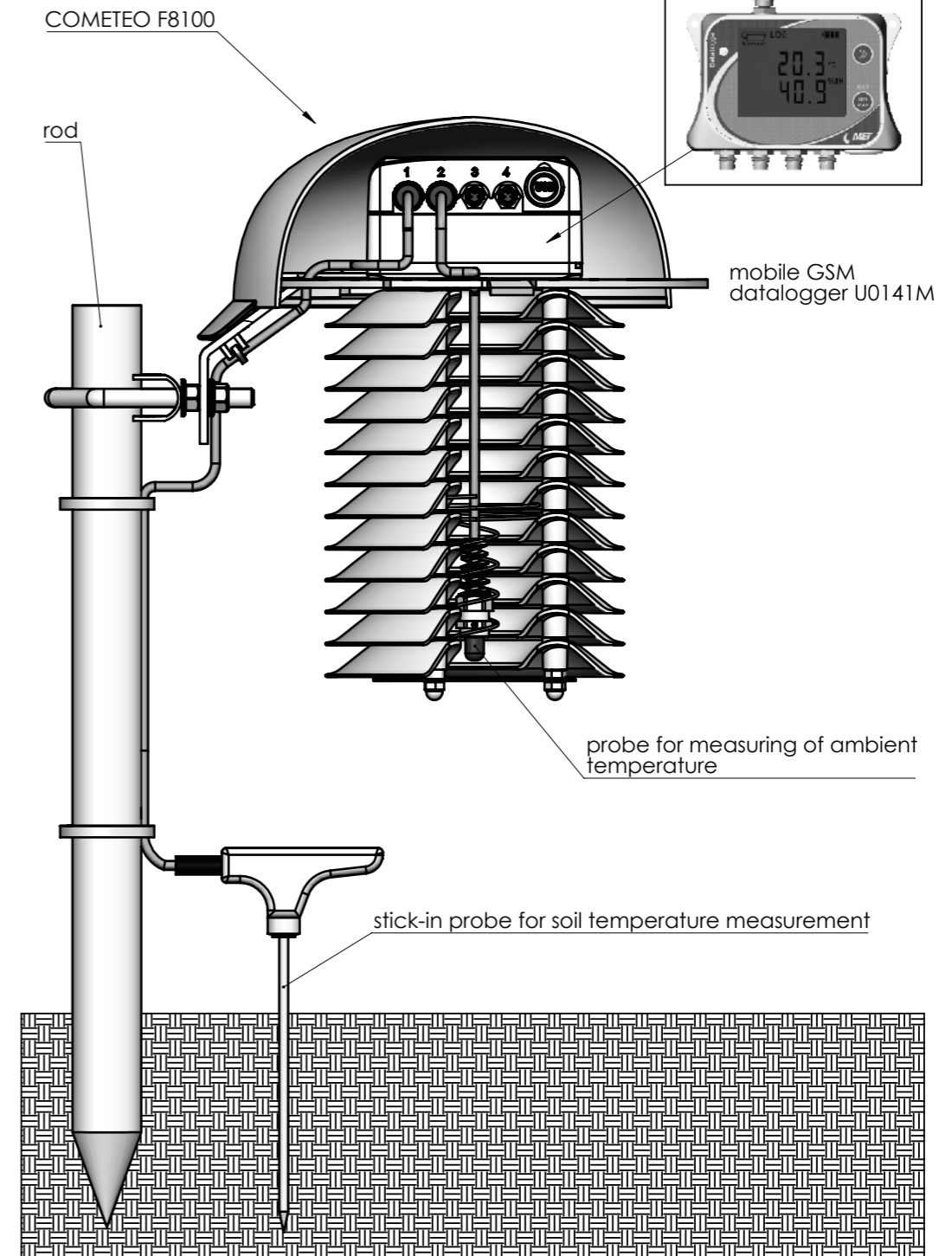


# Solution for agriculture



COMETEO along with the GSM datalogger offers a unique opportunity to measure soil and air temperature under extreme conditions with remote data readout. It is a completely autonomous solution that measures, stores values in memory or sends data to a central database or cloud. The upper and lower limit can be set for each of the four measuring channels. In case of exceeding these limits the GSM datalogger sends text about critical information. Users may also be informed of a device malfunction, battery condition, memory or external power failure.

| TECHNICAL DATA  |  |
|---|--|
| Temperature operating range:  | -30 to +80 °C  |
| Relative humidity operating range:  | 0 to 100 % RH  |
| Accuracy of temperature measurement:                                      | ± 0,4 °C   |
| Data logging interval:  | Adjustable from 1s to 24 h   |
| Total memory capacity:  | 500 000 values   |
| indication of alarm:  | SMS, JSON, acoustic, 3-colours LEDs  |
| IP protection:  | IP67 - protected against influence of temporary immersion into water                         |
| Operating lifetime relating to a single charge of the Li-ion accumulator: | Several months to several years according to the device setting and number of messages sent. |
| Dimension:  | 220 mm (diameter)<br>250 mm (height)   |
| Weight:   | approximately 900 g  |
| Material:   | ASA - UV stabilized, antistatic  |



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measurement

