

- Matt black undersides to reduce solar radiation influxes
- Proven toughness, UV stability and salt spray resistance
- Easily dismantlable; additional cable routing

Design features

The Weather and Radiation Shield features a unique double louvered profile design which gives better protection, keeping the interior drier and cleaner for longer. The second key element is the black underside of the lamellas to remove reflected solar radiation influxes away from the sensor tips.

The Weather and Radiation Shield helps to ensure that measurement accuracy maintains and sensors are protected from blowing precipitation, insect life and debris.

Materials technology



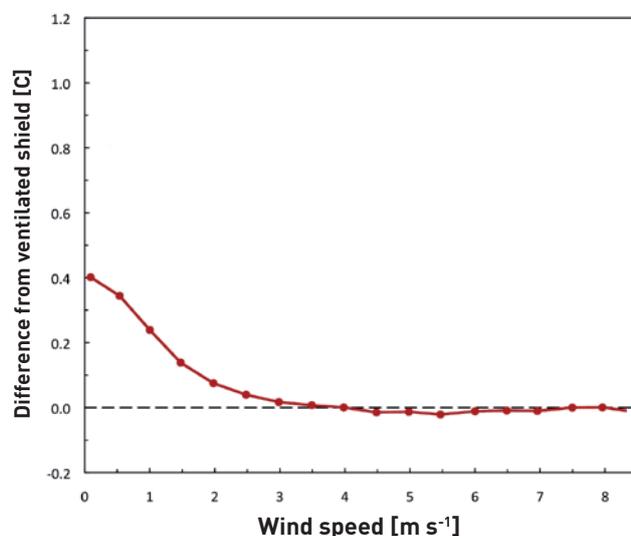
The compact and rugged weather and radiation shield provides excellent measurement performance. The shield is made of double louvered high impact UV-stable polycarbonate plastic louver plates. In order to reduce solar radiation influxed the shield has matt black undersides. The outside of the shield is made of gloss white aluminium with a durable white polyester powder coating. The weather and radiation shield fits onto horizontal and vertical structures. It is mounted via a stainless steel 'V' bolt using securing nuts to fit a pole of 25 ... 51 mm in diameter.

Sensors with 9 ... 20 mm in diameters and up to 160 mm inside the shield can be installed.

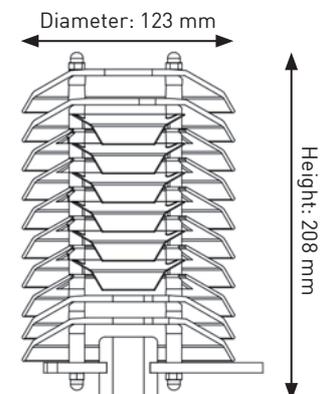


Impact of wind speed on sensor behaviour

A study confirmed that the shield design reduced the weather affects on the temperature sensor installed inside the shield. The used data are averages that show the mean temperature difference as a function of wind speed. Temperature measurements from passive shield have been compared to temperature measurements from a ventilated shield. At wind speed of 4 m/s or greater, the average error is nil.



Dimensional drawing



Overall height including bracket: 300 mm
Weight: 1.01 kg

Last Modification: 11 May 2017