

RAD06,10,14 & Met20/21

Unaspirated Radiation Shields



**More accurate measurements
than comparable shields with
two ranges to choose from**

Overview

These radiation shields are designed to house temperature and humidity probes to protect them from the heating effects of solar radiation and also to protect them from direct exposure to rain and snow. The shields have improved design and performance characteristics compared to similar screens on the market whilst still being relatively low cost.

Two ranges of radiation shields to choose from:

Compact RAD 06, 10 & 14 plate shields - Smaller, rugged shields which provide excellent measurement performance. Greater than 50% reduction in measurement errors in tests, compared to industry standard shields.

MET 20 & 21 shields - Larger shields offering good performance whilst giving the very best level of protection in severe environments. The preferred choice for marine installations and where blowing precipitation is likely.

Benefits and Features

- › Reduction in solar radiation errors - greater accuracy
- › Unique wasp and bug deterrence
- › Easily dismantable double louvre stack for cleaning
- › Extra secure positive locking sensor grips
- › Proven toughness, UV stability and salt spray resistance
- › No power required
- › Low cost compared to large Stevenson screens
- › Good protection of sensors from rain and snow
- › Easy and fast installation
- › Long term durability

Technical Description

All unaspirated radiation shields overheat when solar radiation is high and wind speed is low. Problems are also seen in the winter when the sun's angle is low or there is reflection off snow. However, the unique design and construction of these sensors is specifically designed to overcome these issues. The design of this shield has a white outer reflective surface combined with an inner barrier of non-reflective, black louvers to prevent sunlight reaching the sensor whilst still allowing air to flow through to the sensor.

This unique construction is more effective at blocking solar radiation and thus the sensors inside the shield give a more representative reading of the true air temperature and relative humidity. Errors under adverse conditions are typically half those compared to similar shields. The shape of the louvers is based on an established design that is in common use in a modern Stevenson screen made by the same manufacturer. That screen is sold to national meteorological services worldwide

For comprehensive details, visit: www.campbellsci.eu/unaspirated-radiation-shields 