MeteoShield - Professional

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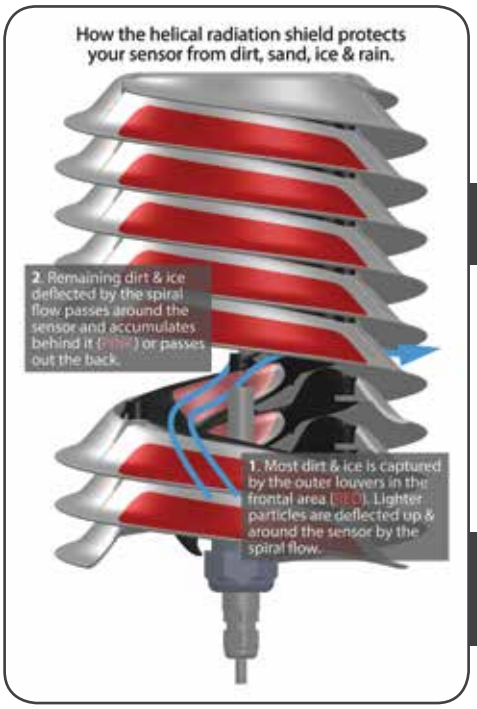
Temperature & Humidity

MeteoShield - Professional

Naturally aspired helical solar shield/screen. **Double-Helix shape eliminates temperature errors** from solar radiation more effectively than conventional multi-plate shields while offering unsurpassed **protection from the sun, dirt, rain, snow, sand & dust**. Double-helix increases clean air flow and rejects dirt particles away from the sensor, while keeping sensors cleaner than traditional multi-plate and fan aspirated shields.



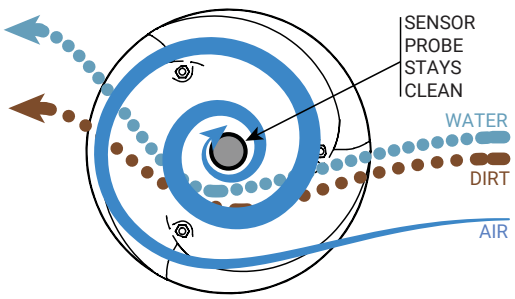
Especially well suited for harsh & extreme climates.

- WMO compliant temperature, humidity and dew point
- Fast response due to high ventilation rate even without a fan
- Protection from water spray and sensor dirt buildup
- Highly accurate temperature & humidity measurement
- Exceptional water shedding and return to accuracy after rain
- Superb performance in high-reflectivity environments: snow, desert, city, marine...

Higher reliability with better temperature accuracy than many fan-aspirated shields in tough environments

Keeps your sensors cleaner

Heavier particles like water & dirt are expelled from the helical flow, thus keeping the sensor cleaner, dryer & ice-free.



Helical MeteoShield

Minimal dirt buildup over one winter season in a road-side weather station.

Competitor Multi-Plate Radiation Shield

Significant dirt buildup common to all multi-plate solar radiation shields over the same time period.

Unbeatable combination of reliability and accuracy for critical applications where absolute temperature accuracy is important

UPGRADE TO HELICAL RADIATION SHIELDS

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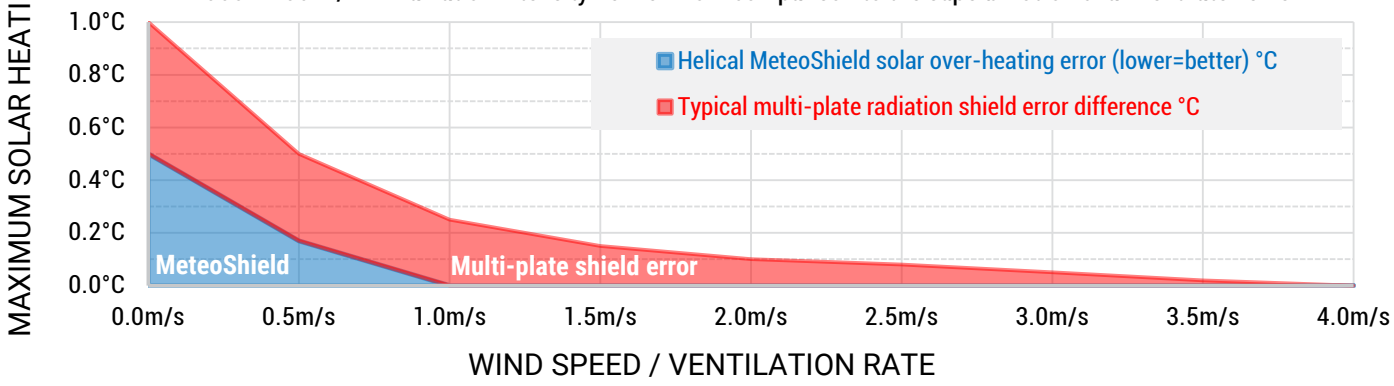
Helical MeteoShield SOLAR RADIATION ERROR

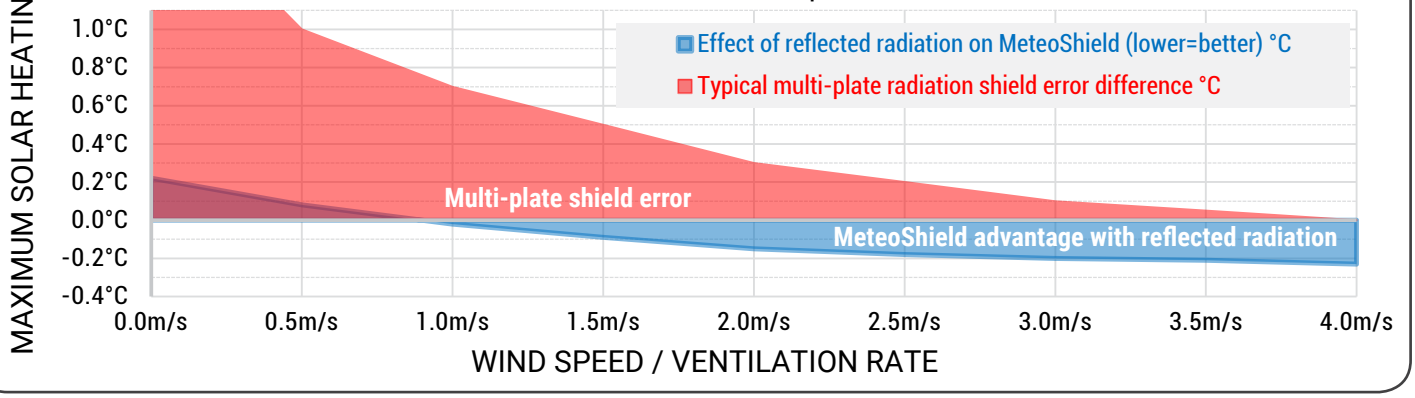
Influence of Wind Speed on Internal Temperature Measurement, 60-70° Sun angle,
1000-1100 W/m2 irradiation intensity derived from comparison to the superb Rotronic fan ventilated shield.



MeteoShield offers practically zero temperature error in >1 m/s wind conditions, which occur over 99% of the time. blue)

Helical MeteoShield REFLECTED RADIATION ERROR

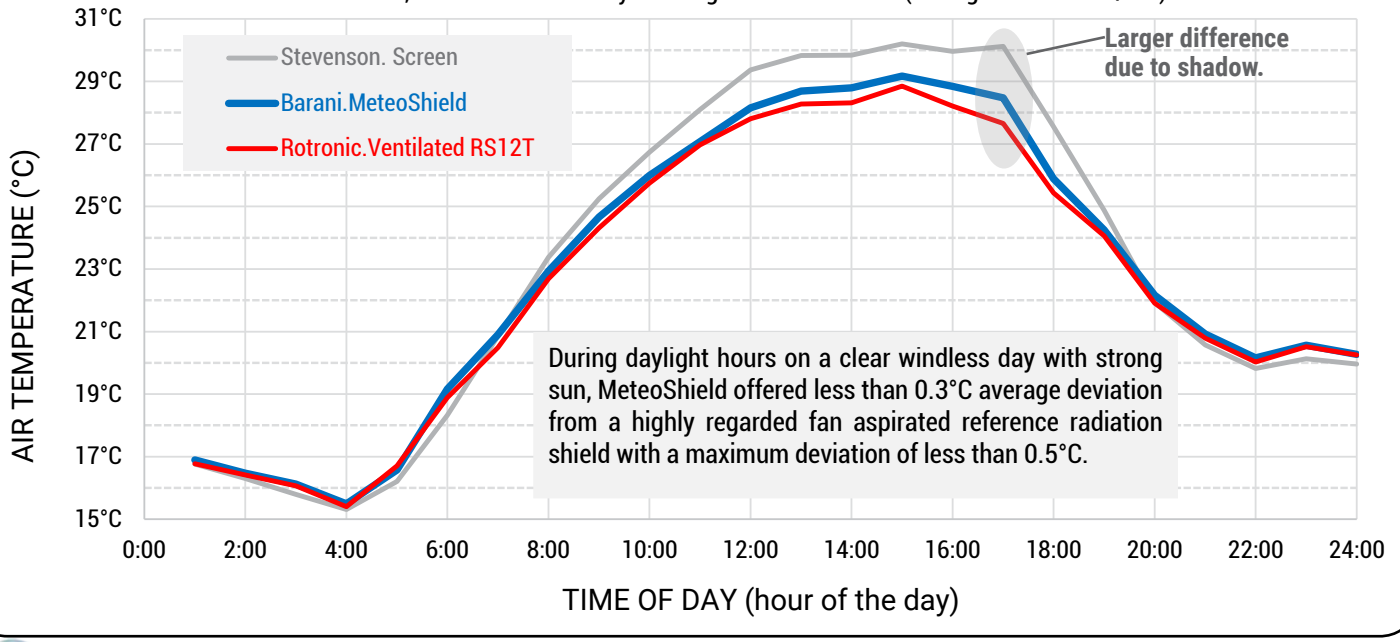
Influence of Snow (sand, water, ice, concrete) on Temperature measurement stability compared to a fan ventilated shield. Values bellow zero demonstrate lower influence of external solar & long wave radiation on temperature measurement than fan aspirated shields.



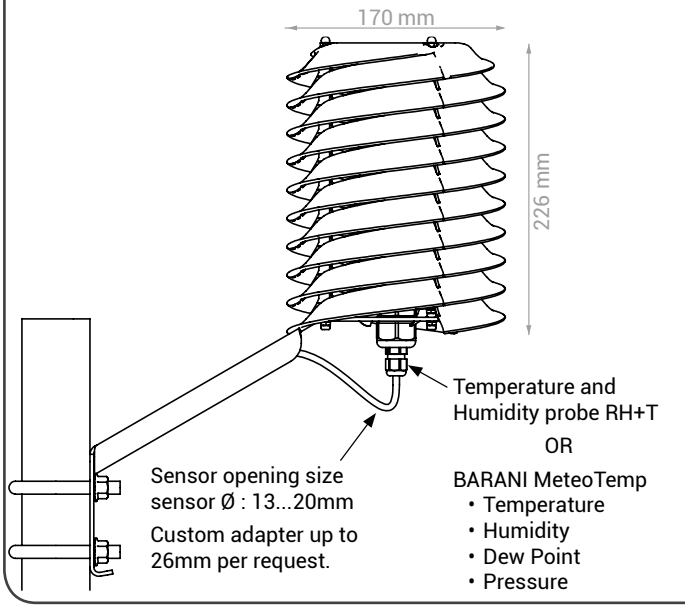
MeteoShield offers better temperature stability & accuracy than fan aspirated shields in high reflectivity environments such as over snow, ice, water, sand or concrete as illustrated by lower solar heating compared to the reference fan aspirated shield. (blue)

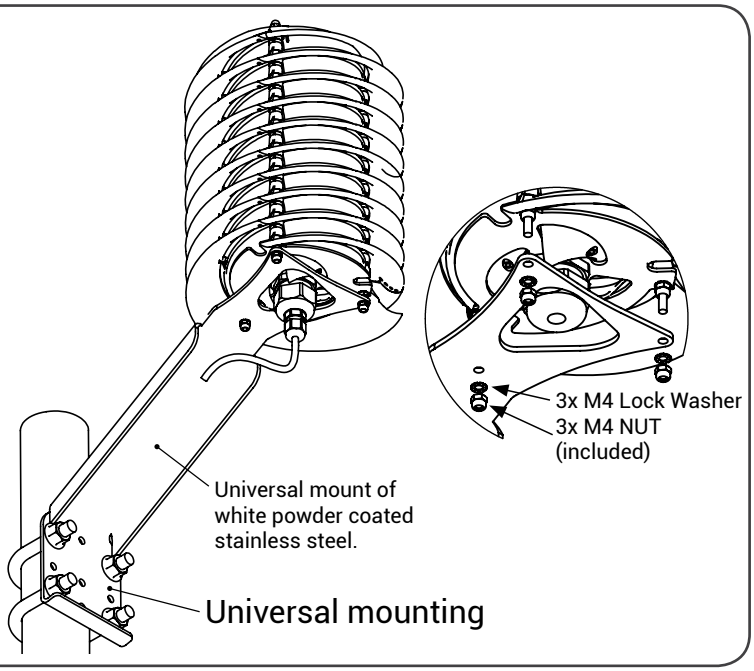
Independent Comparison Radiation Shield Testing

June 3, 2017 a windless day with high solar insolation (strong sun >1000W/m2)

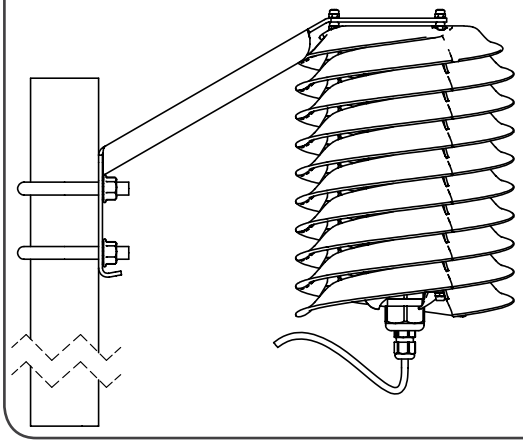


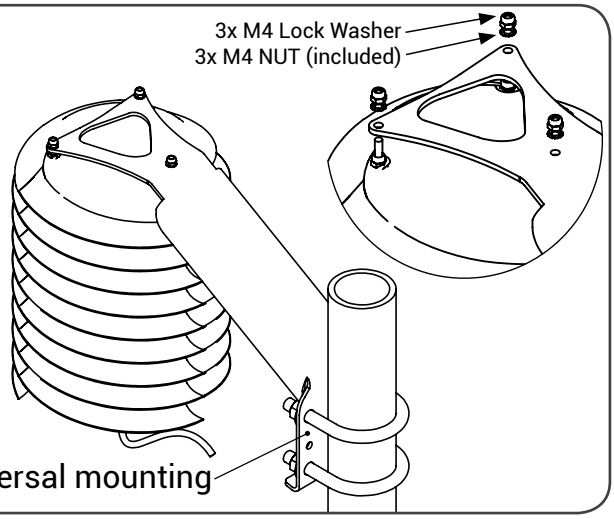
Bottom mount (default)





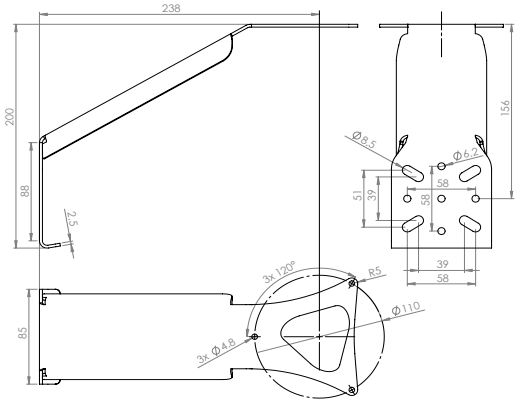
Top mount (special request)





Universal radiation shield mount

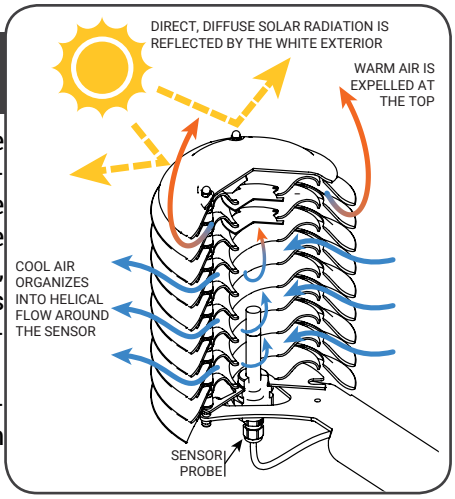
2.5mm white powder coated stainless steel



Double-Helix Ventilation

Helical radiation shield shape ventilates better than multi-plate radiation shields while maintaining better temperature sensor protection from dirt, sand, dust, rain, snow and ice, thus extending sensor life and long-term measurement stability.

It performs better than many fan-ventilated radiation shields in high reflectivity environments.



Reach your Gold Standard of measurement with BARANI sensors. ISO:9001 quality.

PATENTED / REGISTERED: EUIPO 002979179-0001...0006