MeteoShield[®] Pro Gen 3

BARANIDESIGN

- AGRICULTURE
- AIRPORTS
- BUOY & MARINE
- COASTAL

- HYDROLOGY
- INDUSTRIAL & PLC
- INTRINSICALLY SAFE
- IOT

- METEOROLOGY
- OCEANOGRAPHY
- ROAD MANAGEMENT
- POLAR AND WINTER
- SHIPS
- SKI LIFT & SNOW MAKING
- SMART CITIES
- WEATHER STATIONS

3rd Generation features further improvements for snowy & desert climate extremes





MeteoShield[®] Pro Gen 3

Naturally aspired helical solar shield/screen. **Doublehelix shape eliminates temperature errors** from solar radiation more effectively than conventional multiplate 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.

Mean overheating 0.1 °C for >800 W/m2 wind <1 m/s

- All weather accuracy without requiring fan aspiration
- · More accurate with lower measurement uncertainty than fan-aspirated shields
- · WMO compliant temperature, humidity and dew point
- Protection of sensors from water spray and dirt buildup
- Exceptional water shedding and return to accuracy after rain
- Precision even in high-reflectivity environments: snow, desert, city, marine...
- Damage and impact resistant down to -80°C, UV resistant, salt water resistant.

Higher accuracy and reliability than most fan-aspirated shields in all environments

Helical MeteoShield® Pro

Competitor Multi-Plate Radiation Shield

Keeps your sensors clean





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



Significant dirt buildup common to all multiplate solar radiation shields over the same time period.

Best-in-class reliability and accuracy for critical applications where absolute temperature accuracy is important

UPGRADE TO HELICAL RADIATION SHIELDS

BARANIDESIGN



"Despite the fact that the (2015) BARANI shelters are not artificially ventilated, their performance is better than our artificially ventilated compact shelter."

"The (2015) BARANI helical shelters have shown excellent results with very limited heating under strong solar radiation. The mean overheating is as low as 0.2 °C for medium global solar radiation and low wind speed (<1 m/s).

It is unclear why the (2015 MeteoShield® Professional) overheating is lower for higher global solar radiation."

60+00

0.6

0.4

0.0e+00

- quoted from an independent comparison by the Royal Meteorological Institute of Belgium

- New generation 3 MeteoShield has 50% better accuracy than generation 2 & 66% better than the 2015 original
- Design based on WMO testing & user feedback
- Keeps sensors clean for lower maintenance



Double-Helix Ventilation

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

It performs better than many fanventilated radiation shields in high reflectivity environments.



