

# The High Sierra Difference

WEATHER MONITORING SOLUTIONS



HIGH SIERRA ELECTRONICS, INC  
*environmental monitoring solutions*

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*environmental monitoring solutions*

## RWIS

MEASURING THE WEATHER  
TO PROTECT THE PUBLIC  
AND IMPROVE TRAFFIC SAFETY

- Flooded Roadways
- High Wind
- RWIS
- Visibility and Fog

highsierraelectronics.com

At High Sierra Electronics, Inc. our focus is on customer satisfaction. We believe that our success is determined by what we help our customers achieve.

We have a longstanding reputation for our business integrity, engineering expertise, product reliability, and professional service. Our customers know they can rely on our commitment to provide solutions that support them in their mission.

Since 1992, we have been designing and manufacturing environmental monitoring systems for the protection of lives and property. Our systems help identify threats posed by the weather, which include flooding, dangerous road conditions, and vulnerable dams and levees. We provide turn-key solutions – from sensors in the field to central software that collects data for decision makers and disseminates alarms.



## Mobile Surface Sentinel

## Road Weather Technologies

Flexible  
Reliable  
Cost Effective  
Non-intrusive



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# Mobile Surface Sentinel

## VEHICLE MOUNTED PAVEMENT AND AIR TEMPERATURE

The Model 5436 **Mobile Surface Sentinel** is a precision instrument that provides **pavement temperature** and **air temperature**, in real-time, from a moving vehicle to an in-cab color LCD display unit. The vehicle mounted sensor connects through a **wireless** Bluetooth connection to the Mobile Display Unit (MDU) for simple installation without the need to route wires from outside to inside the vehicle. Transform your vehicle into a weather station that will detect and alert the vehicle operator of possible freezing conditions. The sensor system was designed for the high demands of road weather management professionals.

For full specifications and product datasheet please visit:

[www.highsierraelectronics.com/mobilesurfacesentinel](http://www.highsierraelectronics.com/mobilesurfacesentinel)

## Real-Time Road Weather Data at Your Finger Tips

### MOBILE SURFACE SENTINEL SENSOR



- Vehicle mounted pavement temperature and air temperature
- **Bluetooth communications** to MDU for easy install
- Low power consumption for connection directly to battery or switched power sources
- **Industry leading response time** for faster accurate temperature measurements
- Fully encapsulated electronics for durable weatherproof design
- Accurate and responsive surface temperature sensor
  - $\pm 0.5^{\circ}\text{C}$  at  $0^{\circ}\text{C}$  otherwise  $\pm 1^{\circ}\text{C}$  ( $\pm 1^{\circ}$  at  $32^{\circ}\text{F}$  otherwise  $\pm 2^{\circ}\text{F}$ )
- Accurate and responsive air temperature sensor
  - $\pm 0.25^{\circ}\text{C}$  ( $0.45^{\circ}\text{F}$ ) Typical

### MOBILE DISPLAY UNIT (MDU)

- **Color LCD** display of surface temperature and air temperature can be seen in direct sunlight
- **Trending graph** with auto ranging temperature scale allows you to make more informed decisions
- **Alarm output** with user definable temperature threshold (low or high temperature)
- User selectable temperature scale in  $^{\circ}\text{F}$  or  $^{\circ}\text{C}$
- Capacitive touch buttons with multiple profiles, brightness level (auto or fixed) and menu as main screen options
- RS-232 and RS-485 serial output standard on back of unit



# Simple. Reliable. Durable.

## VEHICLE INSTALLATION

Connection from the sensor to display is through a wireless Bluetooth connection. Simply connect the sensor to the vehicle power source and the display to a switched power source. No need to route wires from outside to inside the vehicle, reducing installation costs.

Each sensor comes paired with the MDU for a plug-and-play installation out of the box. The MDU can also be paired with a different sensor in the case of moving or replacing sensors.

The sensor comes standard with a stainless steel mounting bracket and the MDU comes standard with an articulating ball joint mount. The standard mounting brackets fit into available accessories for simple and quick installation on the vehicle.



## BENEFITS AND APPLICATIONS

- Save money in labor and material by knowing when road treatment is needed
- Increase safety by alerting the vehicle operator of freezing conditions with user definable road temperature thresholds
- Integrate into existing Automated Vehicle Locator (AVL) solutions for real-time weather data and fleet management
- The MDU can be used as a wireless bridge when an in-cab display is not needed
- Provides road weather data for your entire route to fill in gaps between existing Road Weather Information Systems (RWIS)
- Alert paint striping crews when the road temperature is warm enough to begin work



### EASY INTEGRATION

High Sierra Electronics provides design services to customize weather systems to meet your needs. Our products are flexible in design and have an open protocol for integrating into your existing and new weather systems. Contact us today to talk to one of our design technicians.



### SOFTWARE SOLUTIONS

OneRain Software solutions can be provided to display real-time data from road weather monitoring systems. Communication and GPS technology is used to display location based weather data in real-time to a web browser. It is also straight forward to integrate into existing AVL solutions.



### MOBILE WEATHER SOLUTIONS

Accurate and reliable weather data is critical when managing road networks. HSE is committed to providing the highest quality HydroMet and Road Weather Information Systems (RWIS).