

RENNICKS

klimator



Rennicks IoT Weather Station

The Rennicks Internet of Things (IoT) Weather Station is a reliable, easily accessible, affordable multi-sensor device.

The multi-sensor device measures:

- Air temperature
- Air humidity
- Road temperature

Providing key critical data, Authorities can see, at a very granular local level, whether winter road treatments are necessary.



Real time
information on
how weather
impacts local
road conditions

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The Rennicks IoT Weather Station by Klimator provides network operators with real time information on how weather impacts local road conditions. This data will empower operators to make informed decisions on the appropriate treatments necessary to maintain optimum network resilience during adverse weather events.

Not limited to the roadside, the multi-sensor device can also play a significant role in monitoring the conditions of cycle path networks and car parks, enabling operators to keep areas safe for use. With the drive for modal shift and the transition to and introduction of active travel schemes, it's critical that highway operators have a firm grasp on seasonal weather impacts whatever the weather condition.

Key Features and benefits

- **Affordable** - Significantly lower cost than existing weather station technology used within the UK. The installation costs are also considerably lower as there's no need for mains power or communications - the system can be mounted on existing infrastructure.
- **Low maintenance** - As the product is IoT, it has its own internal battery which will last 2-3 years. The solution is a self-sustaining system which requires very little maintenance.
- **Communication** - The product communication works on Internet of Things technology. It is optimised to work on the Sigfox network but will also easily integrate with other IoT providers, removing the need for sim cards, modems and the associated costs that arise from this.
- **Multi-sensor** - The solution, dependent on configuration can also provide reports on weather data, activity data, rain data, soil moisture data, and water level data.
- **Easy access to data** - The data is easily accessible from a purpose-built browser-based software platform where alarms can be set, and notifications can be delivered when self-determined values are reached. This functionality automates the monitoring process, removing the need to have users constantly monitoring data. The data comes in the form of an API so can also be fed into other weather monitoring and forecasting systems if necessary.
- **Environmental benefits and consequential savings** - By enabling more definitive decisions on road treatments, significant environmental savings will be met and safety of highway workers will be enhanced. Definitive decisions supported by data led information will drive a reduction in vehicle wear and tear, fuel used, treatments used, salt used and the reduction in quarrying for minerals. This will also lead to reduced demand on supply chain logistic environmental impacts. In addition, no new power supply is needed, contributing to a significantly lower environmental impact. An impactful reduction in carbon and emissions will be achieved.
- **Easy installation** - A lightweight product that can either be installed on a purpose-built lightweight column or can fit onto existing infrastructure. With minimum installation time, the need to create high volume congestion on the highway network will be negated.