

ITS Integrated Environmental Sensor

The ITS Integrated Environmental Sensor can be combined with any of our ITS solutions to offer clients the ability to monitor the external environment, producing a wide range of air pollution data that can be used to inform and direct on issues of air pollution safety.

Air Quality Monitoring

This solution is a low-cost system that offers the ability to build a high-density ambient air quality monitoring network that records data in real-time.

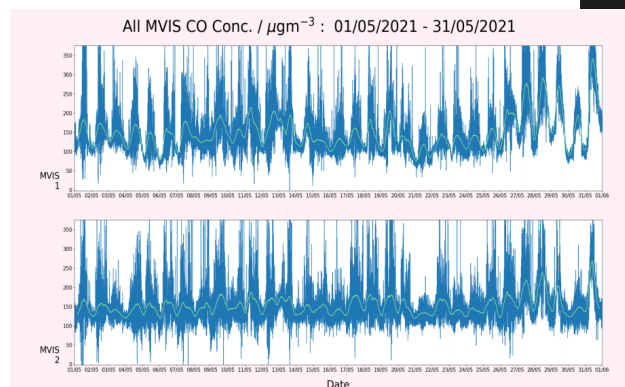
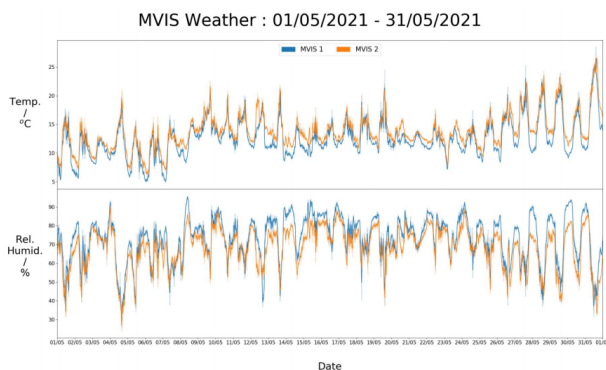
With low power demands, this unit can be integrated with any of our solar powered ITS solutions for air quality monitoring in many applications, including but not limited to:

- Work places / work areas
- Construction site safety
- Events
- Town centres / cities
- Urban roads / Highways

These applications make this product a useful tool for a variety of industries, organisations and projects concerned with air quality, such as schools, Tier 1 construction contractors, local authorities and traffic management companies.

Perfect for temporary applications, this solution offers a very low cost alternative to static Air Quality monitoring stations and allow clients to cover more space, quickly and cost effectively.

This product's bespoke hardware is manufactured in the UK and uses the latest generation of electrochemical sensor technology and LoRaWAN communication to collect and record real-time data onto its secure online dashboard.



Practical Integration

Integrating this sensor with any of our ITS solutions allows us to offer clients effective, multi-functional units that bring not just the benefits of the sensors themselves to portable applications, but also all the functionality of the products they are integrated with. This is especially practical, as in many cases where environmental data is required, other ITS solutions would enhance safety or are already being used, such as our portable Variable Message Signs, or portable CCTV.

Integrating a sensor with these products provides a discreet and simple way to deploy environmental monitoring solutions without requiring additional units on-site. For many clients, this is highly important as often, space can be limited, so in offering multi-functional units that combines necessary functionality, the required footprint for the required technology is kept to a minimum.

Real Time Data

Data collected from this solution is displayed in real-time onto an online management dashboard. The status of each unit is displayed together with easy to read dials.

More detailed graphs allow clients to drill down and analyse the data on a minute by minute, day by day basis.

Fully customer-branded breakdown reports are also available from MVIS for our client's convenience, making presenting and reporting on the data easier than ever.



Key Features

- Data communication options via 3G/4G/5G, WiFi or Ethernet.
- Additional GPS Module can be added.
- Power 12Vdc (optional 240Vac supply)
- Environment Operating range: -18 to 50 Celsius
- CE Certified
- Power draw is less than 350 mA and weighs 0.75kg
- Capacity for up to 4 electrochemical sensors from a choice of : CO, SO2, O2, NO, NO2, H2S.
- Ultra-low noise sensing for gasses (ppb) and particulates (µg/m)
- Photo Ionisation Detector (PID) for detecting VOCs with ionisation potentials < 10.6 eV
- Formaldehyde sensor available Q3 2020
- Particulate matter / dust sensor PM1, PM2.5, PM4, PM10
- Environmental sensors – temperature, humidity and atmospheric pressure
- Sensors are shipped calibrated but require 24hr stabilisation on boot up.
- All devices can be accessed remotely for troubleshooting, health checks, software updates, reconfiguration.
- Air quality sensors have a 24mth lifespan. Units come with a 12mth manufacturer's warranty.

