

Healthy & Smart Spaces





IoT Monitoring





Smart and small real-time wireless sensors allow a building to become a smart workspace. The technology is ingenious, taking away the need for wiring and connectivity to existing building networks. The information is transmitted in real-time to those that need it quickly, enabling smart and proactive resource planning and proactive management of scarce resources.



By monitoring ambient humidity and temperature in key pinch-points in a building, it gives management a clearer picture of the workplace environment.



The use of event-driven sensor technology also allows managers to detect breaches in security, alerts when environmental conditions are extreme or identify water leakages deep within the system or building structure and legionella risk. This vital data can help prevent outages or work-related illnesses.

Sensors



Key featuresSmart IoT Monitoring

- Versatility of all our sensors make it possible to monitor many different areas within an operation.
 The wireless sensors can be placed anywhere with virtually no effect on the form or function and allow flexible integration to existing data systems.
- Our solution fits any operation size depending on requirements and scale, making it the most cost-effective offering on the IoT market today. Reports, alerts and real-time information are provided quickly to those that need it.
- Addresses the shortcomings of current sensing solutions, with long battery life, operating independently of existing network structure, leaving cumbersome hardware and inflexible software behind. A more comprehensive overview of your assets leading to fewer interruptions.



Key featuresIndoor Air Quality

 Closing doors and windows in the colder months and cranking the heating up can cause a build-up of pollutants that damage health.

- Poor ventilation causes poor quality air that in turn is associated with health issues and cognitive impairment.
- Many of the problems linked to poor IAQ can be overcome by better ventilation, filters and healthier product choices.
- By monitoring the air we breathe we have a valuable source of information to avoid indoor air hazards, illness and reduced productivity.







RTSmartData believes in Smart and Healthy workspaces and our product suite addresses this using the very latest wireless blue-chip sensor technology. Our end-to-end solution is easy to install, low cost and zero maintenance. We provide intuitive real-time user interfaces, instantaneous alerts and comprehensive reports to those that need it, in a format they prefer and at the times they require them. Our systems allow business owners to optimise scarce resources, save energy costs, plan corrective maintenance and implement targeted preventative measures. We help adapt your workspaces to become smart and healthy environments for all.

Indoor Air Quality Factors



CO₂

Carbon Dioxide or CO2 is a greenhouse gas that is natural and harmless in small quantities, but as levels rise it can affect concentration. High levels are directly related to low productivity and high sick leave making this a crucial concern in offices, schools and home environments. *Guideline indoor CO2 level is < 1,200ppm.*



By monitoring the air you can understand which areas in your building have elevated airborne virus transmission risk. It can help you keep in line with new and emerging recommendations, do what you can to create a safe environment for building occupants, and show them that you're prioritising their health. The factors used to calculate virus risk in a room are CO2, temperature and humidity.



VOC

Volatile organic compounds (VOCs) are emitted as gases from certain solids or liquids including chemicals. As with other pollutants, the extent and nature of the health effect will depend on many factors including level of exposure and length of time exposed so monitoring is essential. *Guideline VOC level is < 250 ppb.*





Radon is a naturally occurring radioactive gas that results from the decay of uranium in rocks and soils. It can cause illness, sometimes severe. It is necessary to regularly monitor your radon levels to ensure you mitigate against its more severe effects. Guideline Radon level is ideally zero (but below 100 Bq/m3 if possible).





Temperature

Indoor temperature is a key factor in the maintenance of the health of a building and in the productivity of its occupants.

Monitoring the room temperature will assist in the maintenance of an optimum level to help reduce drowsiness, viral risk and energy costs.



By monitoring our indoor air quality, we can avoid any adverse effects that stem from humidity. Not only can high humidity levels influence our homes, concentration and health, but overly low humidity levels are now known to help the spread of infection.

It can also help detect risk of mould in a building. Guideline humidity is 30% to 50%.



Light

The importance of monitoring indoor light levels in a building is twofold. Firstly, it is important to ensure that adequate light is maintained to ensure productivity of those working or studying in the rooms.

Secondly, monitoring your light allows a building manager to help optimise his/her energy costs and reduce harm to the environment.



Neither positive nor negative air pressure in a building is healthy and they will each have different effects and impacts depending on the season, the temperatures and the humidity levels.

The greater the differential in temperature between inside and out, the greater the concern so monitoring is key to managing it correctly.



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