

Detecting forest fi Quality in Portland

Our Client

Wunderlich-Malec Engineering, Inc. is c solution services industry in the United the year 1981, with a mission to provide neering, quality system integration, and trol house solutions. They have over 400 work seamlessly throughout the year in facilities across the North American cor campus facilities of Wunderlich-Malec i area is prone to constant forest fires, wh facility is vulnerable to.

The Challenge

Forest fires cause excess smoke, heat an order to detect a forest fire happening in ing system was necessary. However, the that detected CO, CO_2 , $PM_{2.5}$, and PM_{10} , a tionally, monitoring the data on a consist remote location were required to conduct that the data received by such an air que work connectivity options like MODBUS

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3

Installation Details

Polludrone Lite has been installed on the premises of the Wunderlich-Malec facility in Portland, US.



 "Easily integrable wired connection with our Modbus system, data collection for air quality made simpler. Over-the-air device updates were helpful to refine data based on humid environmental conditions" - Guy Chan-Controls Engineer- Wunderlich Malec

The Solution

Oizom with Lam Research offered Polludrone Lite to the Wunderlich-Malec for monitoring air quality and detecting forest fire in its Portland facility. Polludrone Lite can accurately monitor $PM_{2.5}$, PM_{10} , CO, CO_2 , Noise, UV, light, temperature, and humidity on a real-time basis. Polludrone is capable of transferring the data to the user's display device through MODBUS integration. It can also survive intense heat and severe weather conditions, thanks to its robust body composition. Additionally, it is also Solar compatible and has a Battery Pack that can store energy so that the device functions despite a possible outage of electricity during a fire. This way, the authorities in the Portland facility can be assured that the data recorded will be stored and utilised for research purposes without any mishaps.



The Result

Wunderlich-Malec Portland unit is now capable of detecting forest fires by monitoring air quality. Polludrone has enabled Wunderlich to monitor various air quality parameters on a real-time basis. Polludrone's capability of transferring data through MODBUS has made it convenient to conduct research in Wunderlich. Additionally, the authorities can be empowered to take precautionary measures for the safety of their workers during forest fires.

Oizom is an environmental IoT company offering data-driven environmental solutions for better decision making. With our sensor-based hardware, we monitor various environmental parameters like air quality, noise, odour, radiation, weather conditions, etc. Our data analytics platform derives many actionable insights for authorities, communities, and industries. Oizom strives to play an essential role in a sustainable future through smart environmental solutions and data science.