

Empowering authorities to monitor the air quality and odour levels in the Port of Duqm, Oman

Our Client

Port of Duqm is located in the Al Wusta region of Central Oman and hosts a number of cargo shipments, vessels, marine life and fishery storage and industries. It stretches up to 2.2 Kilometers and harbours more than 1148 vessels being served. Around 70% of Oman's fishery originates from this area, and the port acts as a medium to store and transport the same to various regions of Oman and other countries. The port generates millions in revenue and is responsible for hundreds of employees on the ground.



The Challenge

The Duqm port harbours hundreds of workers in the logistics/supply chain throughout the year. This resulted in a dust-laden atmosphere with the release of harmful gases. This is why establishing an air quality monitoring system was essential to ensure safe breathing conditions for the workers. The Duqm Port used to manually examine, validate and test the air quality, which was laborious and time-consuming. It was challenging to keep track on a regular basis this way. Additionally, with the power supply being heavily dependent on diesel in the port, it was essential for Duqm Port to have a monitor that functions with a backup battery in case of power failures.

Installation Details

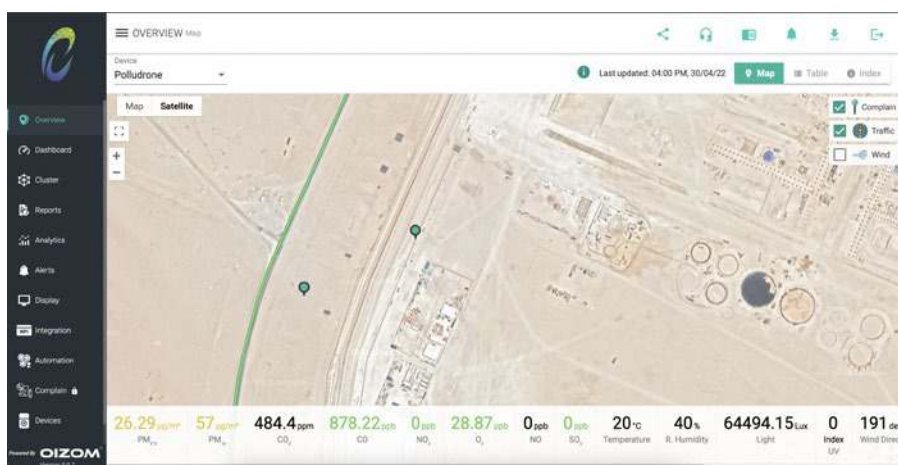
Polludrone Smart has been installed in the Port of DUQM, Oman.

Odosense Custom has been installed in the Port of DUQM, Oman.



The Solution

Oizom with National Energy Center, Oman, offered 1 unit of Polludrone Smart and 1 unit of Odosense to the DUQM Port in Oman for monitoring the air quality, dust, odour and other hazardous gaseous emissions in the port. Both Odosense and Polludrone come with a battery backup option that can function during power outages, thus eliminating the requirement of energy from diesel round the clock. The authorities in the port need not manually collect the data from the air monitoring stations, as both Polludrone and Odosense come with a Data Analysing & Visualising platform that can do the work of showcasing the data retrieved from the devices on a real-time basis. The authorities can customize the data viewing experience by changing the time intervals according to the requirement.



“Installation and access to Data Analysing software Visualisation were done seamlessly. We are thankful to Oizom and National Energy Center of Oman for providing exceptional technical support.”

Mohammed, Specialist at Port of Duqm



The Result

Oizom's smart, compact and robust air quality and odour monitoring system in the DUQM port has helped the authorities in accessing the air quality and odour level data on a real-time basis. The Battery backup options have enabled both the devices to function 24/7, thus saving the energy generated by diesel at the night. Safe working conditions have been ensured for the workers in Duqm Port. The authorities are now empowered to make appropriate decisions to mitigate exposure to harmful air pollutants

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.