

Oizom's Polludrone is Continuously Monitoring Air Emissions in Chiplun Village

Our Client

Chiplun, a city in the Ratnagiri district of Maharashtra, is known for its rich cultural heritage and agricultural prominence and as a gateway to Konkan tourism. Located near the Western Ghats, Chiplun is near industrial belts and the Mumbai-Goa highway. It serves as an important commercial hub for the Ratnagiri district and is the headquarters of Chiplun Taluka. Chiplun is not only a center for industrial activities but also boasts a thriving agricultural sector, with rice farming and horticulture being central to the local economy.



The Challenge

Chiplun's geographical and industrial landscape creates significant challenges related to air quality. The presence of the Maharashtra Industrial Development Corporation (MIDC) estate nearby leads to dust pollution (PM2.5, PM10) and harmful gases. The Mumbai-Goa highway (NH66), a major transport route, contributes heavily to vehicular emissions, adding to air quality concerns. Additionally, Chiplun's agriculture and tourism sectors are vulnerable to pollution, which affects crop health, tourism potential, and the overall quality of life. To accurately assess air quality in the village and mitigate its effects on residents' well-being, they wanted to monitor key pollutants, including PM1, PM2.5, PM10, CO, and CO₂. They also needed a device that could monitor meteorological parameters such as temperature, humidity, pressure, noise, and UV levels. Real-time monitoring and efficient air quality management were imperative to address these challenges effectively.

The Solution

In November 2023, Oizom installed three Polludrone Lite devices around the periphery of Chiplun. These devices were installed at strategic locations to capture data from key pollution sources, such as industrial emissions and traffic-related pollutants. These advanced air quality monitors were chosen for their ability to track multiple environmental parameters, including particulate matter (PM1, PM2.5, PM10), CO, CO₂, temperature, humidity, pressure, noise, and UV levels. The devices provide real-time data that helps identify pollution sources from nearby industrial emissions, vehicular traffic, and weather conditions. Chiplun's authority decided to install Oizom devices due to the accuracy, scalability, and multi-parameter monitoring capabilities of the Polludrone lite, along with its robust design tailored for challenging environments.



Installation Details

3 Units of
Polludrone

The Result

With Polludrone Lite, Chiplun gained actionable insights into the state of its air quality, enabling the local authorities to take immediate actions when necessary and make data-driven decisions for long-term environmental health. The data ensures industrial accountability and helps mitigate vehicular emissions during peak traffic hours. Farmers in Chiplun can monitor pollutants that may affect crop health, ensuring sustainable farming practices. This data empowers the agricultural community to safeguard rice farming and horticulture, which are pivotal to the local economy.

The availability of detailed air quality data through the Envizom platform raised awareness among the local population about the potential health risks associated with poor air quality, encouraging residents to protect their health. The comprehensive data allowed local authorities to develop targeted policies for industrial emission controls and environmental protection, ensuring a proactive approach to pollution management.

Oizom is a company specializing in environmental monitoring solutions. They offer products to monitor air quality, weather conditions, and other environmental factors. Utilizing advanced sensor technology and data analytics, Oizom aims to provide actionable insights for construction, industrial compliance, and community awareness. Their solutions can be applied in various sectors including government, industries, and community initiatives.