

Client



Location

Gandhinagar, Gujarat (India)

Application

Smart City Monitoring

Problem

Gandhinagar, the capital city of Gujarat, has undertaken a number of projects as a part of its Smart City Mission. Some of its agendas are implementation of intelligent traffic management systems, smart poles, solid waste management, etc. with the main focus on sustainable development.

Sustainable development of a city requires control on the pollution and waste production, which can be achieved by monitoring the current environmental condition to take corrective and preventive steps towards its betterment.

Real-time monitoring of the ambient atmosphere is utmost important to analyze the environmental parameters based on historical data and trend analysis. Gandhinagar Municipal Corporation (GMC) aims to constrain the negative impact of pollution on the city using advanced technology.

Oizom Solution

Oizom was more than happy to help GMC as the city's agenda matches our goal. Our team installed a customized air quality monitoring solution - Polludrone to study the pollution trend in the city. An ambient air monitoring nexus was created throughout the city by strategically installing the equipment. The solution monitored and analyzed particulate matters PM2.5, PM10, and gases SO2, NO2, CO, CO2, O3 and O2. Polludrone is capable of monitoring environmental data in dynamic weather conditions. For that, environmental parameters like temperature, humidity, noise, light intensity, UV radiations, and rain.

The sensor installed within the equipment is a combination of different technologies embedded as a single unit to read all the parameters. The data gathered from all the equipment is sent to our central server through the cloud platform for analytics. After complete data analysis, the result is shared to the authorities on their Command and Control Centre.



Impact

After installing Polludrone across the city, the authorities can visualize the environmental behaviour of the city. The ill-effects of polluted ambient air on health can be assessed through data. This enables authorities to take data-driven actions to mitigate pollution at heavy tourist attraction areas like Akshardham Temple, Adalaj ni Vaav and other heritage sites along with the State Govt. Buildings.