

# **IOT-Based Air Quality (AQ) Monitoring System.**

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**Abstract:** *Air pollution is a critical environmental and public health issue worldwide. The proposed IoT-based Air Quality Index (AQI) monitoring system provides real-time air quality data to assess pollution levels and their impact on health. Using sensors such as MQ135, MQ6, MQ131, MQ3, MQ2, DHT11, and BMP180, the system measures various pollutants, including CO, NO<sub>2</sub>, O<sub>3</sub>, SO<sub>2</sub>, and particulate matter. The collected data is stored in a database and displayed on a smartphone application. This research examines the system's accuracy, compares results with National Ambient Air Quality Standards (NAAQS), and discusses strategies for improving data reliability..*

**Keywords:** Air pollution

