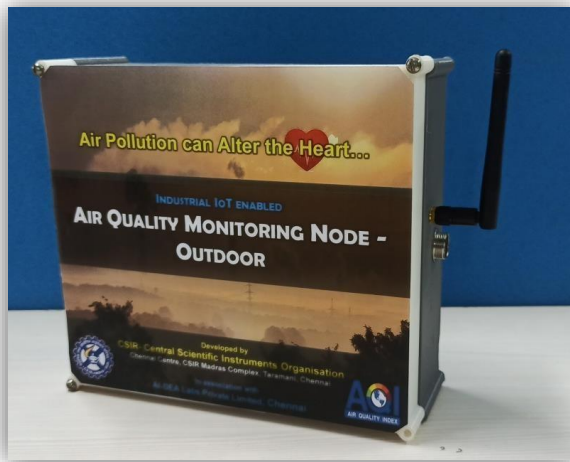


IoT ENABLED & CLOUD CONNECTED AIR QUALITY MONITORING SYSTEM (IAQMS)

INTRODUCTION

CSIR-CSIO has developed a system for monitoring the indoor and outdoor air quality that follows Central Pollution Control Board. Ambient air monitoring is the monitoring of the quality of the air in a particular area. The local ambient air quality can be degraded by a number of sources such as diesel vehicles and power station emissions. The usual substances monitored include dust deposition, PM10, PM2.5, NOx and SOx. Ambient monitoring is often necessary as a condition of an IED license, permit, planning condition, to support license applications or as part of an EIS. A typical example of this is dust monitoring at a quarry to ensure dust levels are below those specified in the planning conditions.

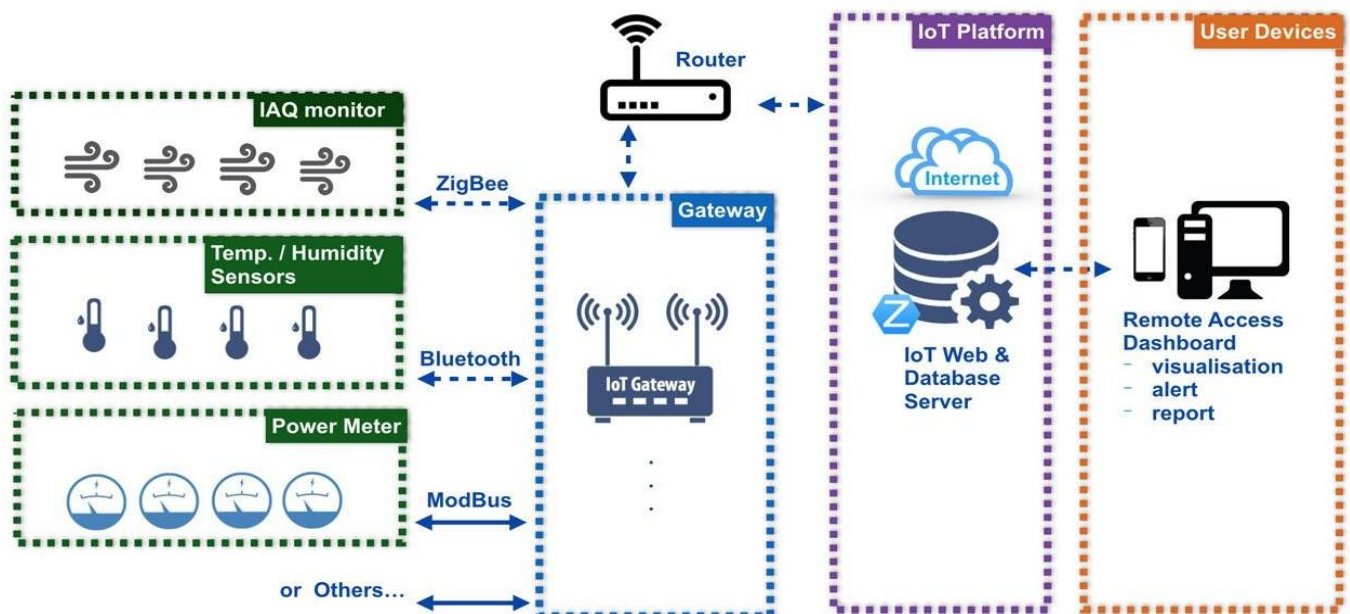


Air Quality Monitoring Node - Outdoor



Air Quality Monitoring Node - Indoor

METHODOLOGY - BLOCK DIAGRAM OF IAQMS



Air Pollution can Alter the Heart...



FEATURES:

Particulate Matter <ul style="list-style-type: none">• PM 2.5• PM 10	Gases <ul style="list-style-type: none">• Carbon monoxide (CO)• equivalent Carbon dioxide (eCO₂)• Total Volatile Organic Compound (tVOC)• Ozone (O₃)• Stannic oxide (SnO₂)• Nitrogen oxide (NO₂)• Ethanol (C₂H₅OH)• Hydrogen (H₂)• Ammonia (NH₃)• Methane (CH₄)• Propane (C₃H₈)• Iso butane (C₄H₁₀)• Sulphur dioxide (SO₂)
Ambience Parameter <ul style="list-style-type: none">• Temperature• Humidity• Pressure• Altitude	
Optional Parameters <ul style="list-style-type: none">• Solar Irradiation• Wind Speed• Rainfall Data	

APPLICATIONS

- Industrial Perimeter Monitoring
- Roadside Pollution Monitoring
- Indoor Air Quality Management
- Planning Condition for Industrial Equipment

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**ENVIRONMENTAL POLLUTION IS AN INCURABLE
DISEASE. IT CAN ONLY BE PREVENTED.**

- BARRY COMMONER