

## Abstract

The system proposed is an advanced solution for weather monitoring that uses IoT to make its real-time data easily accessible over a very wide range. The system deals with monitoring weather and climate changes like temperature, humidity, wind speed using multiple sensors.

## Result

Weather Station 01

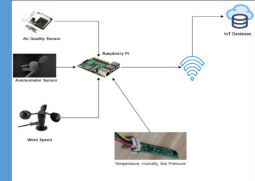
Sensor	Value	Unit
Direction	155	Deg
Speed Average	0.44704	mm/s
Speed Max	8.9408	mm/s
Temp	20.555555555555557	C
Rain Per Hour	0.254	mm
Rain Per Day	0.254	mm
Humidity	36	%
Bar Pressure	971.5	hpa
PM10	5.3	particle
PM25	2	particle



## Objectives

- Design a weather station that can help users to access data anywhere in real-time.
- Using Raspberry Pi SOC (System On Chip), Using sensors like (DHT22, Wind Speed Sensor, Wind Vane, BMP180, and AQI).
- packaging Our Weather Station will be in model with facilities needed to keep up and running that include waterproof box, cooling fan, heat sink, and power supply.

## Data Flow Diagrams



# WEATHER