Title: **Ambient Parameter Monitoring using IOT**

Document: **Requirement Specifications**

Functional Requirements

- Ambient temperature and relative humidity to be measured, temperature in Celsius scale and relative humidity as a percentage.

- Temperature range to be measured: 0-50 degrees C

- Relative Humidity range to be measured   : 20-90 %

- Temperature accuracy: +/- 2 degrees

- RH accuracy   +/-5%

- Minimum update rate of parameters: 2 seconds

- Power supply: 5V (USB powered)

- Display of parameter values on local display

- Update on cloud database should be accessible to user for debugging purposes.

- Current values of parameters should be made available to user in a mobile at any place with Internet connectivity.

Non-functional requirements

- Should have compact custom PCB

- Display and sensor modules to be connected using polarized cables.

- Should have low power consumption. Should be capable of being USB powered for program upload and debugging from a laptop.