Title   : **Environment Monitoring using IOT**

Document   : **Requirement Specifications**

Functional Requirements

- Ambient temperature, relative humidity(RH), atmospheric pressure and altitude to be measured

- Parameter ranges required:

    o Temperature: -40 to 85 deg C

    o RH: 0% to 100%

    o Atmospheric pressure: 300hPa to 1100 hPa

    o Altitude in metres

- Accuracies:

    o Temperature : =/-0.5 deg C

    o RH : 1%

    o Atmospheric pressure: +/- 1.0 hPa

- 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