**Title:**

Iot Enabled risk monitoring system

**Newness/Uniqueness:**

* The application agent is dockerized.
* Power queuing and analytics using mongo DB
* Condition Monitoring
* Not only constricted to cold supply but also to various number of streams.
* Alarm notifications if threshold values exceed.
* Collection and storage of history, data etc.

**Concept and objective**

The objective of our project is to Monitor temperature, humidity and other gas compositions in cold storage . monitoring the real time location, temperature and other parameter through cost effective system integrated by GPS, remote sensors, cloud computing

**Areas of Application in Market:**

* Digital temperature monitoring in laboratories.
* Food Safety compliances
* Warehouse and inventory
* Goods in Transit
* Equipment Monitoring

**Market Potential:**

**Cost Estimation and initial setup:**

**Hardware**

1. PLC - ₹2000
2. Raspberry Pi - ₹3000
3. sensors - ₹2000

For the industrial standard gateways, the cost of the device varies from 10k to 20k based on features of live waterproofing IP certificates. Sensors Rates may also vary for different purposes.

**AWS**

1. 1 million API req / month = ₹ 77 Rs
2. 1 million Rest API / month = ₹ 300
3. 1 million Websocket message/ day = ₹2300
4. General Purpose SSD (gp3) - Storage =₹77
5. Initial Setup Cost = ₹7000 +Setup Cost (approx.)
6. Monthly Investments =₹2800 + monthly maintenance charges (approx.)

|  |  |  |  |
| --- | --- | --- | --- |
| Functionalities | Basic ₹20000 | Premium ₹24000 | Enterprise ₹28000 |
| Sms & Emails alarm | Yes | Yes | Yes |
| 3 years online storage | Yes | Yes | Yes |
| Data logging every 3rd min. | Yes | Yes | Yes |
| Unlimited HW warranty | Yes | Yes | Yes |
| Manual Logbook | Yes | Yes | Yes |
| Online calibration documentation | Yes | Yes | Yes |
| 5 year online storage | No | Yes | Yes |
| Smart data logging interval | No | Yes | Yes |
| Backup at 3 locations | No | No | Yes |
| Unlimited online storage | No | No | Yes |
| Advanced user administration | No | No | Yes |
| Future prediction and its report generation | No | No | Yes |

Basic Plan - ₹20000

This Plan includes:

* SMS & Emails alarm
* 3 years online storage
* Data logging every 3rd min.
* Unlimited HW warranty
* Manual Logbook
* Online calibration documentation

Premium Plan - ₹24000

* + - This Plan includes:
    - SMS & Emails alarm
    - 3 years online storage
    - Data logging every 3rd min.
    - Unlimited HW warranty
    - Manual Logbook
    - Online calibration documentation
    - 5-year online storage
    - Smart data logging interval

Enterprise - ₹28000

* + - This Plan includes:
    - SMS & Emails alarm
    - 3 years online storage
    - Data logging every 3rd min.
    - Unlimited HW warranty
    - Manual Logbook
    - Online calibration documentation
    - 5-year online storage
    - Smart data logging interval
    - Backup at 3 locations
    - Unlimited online storage
    - Advanced user administration
    - Future prediction and its report generation