## Functional requirements

- 1. Gather thermocouple readings from sensors
- 2. Gather flow-rate reading from the flow-rate sensors
- 3. Transmit sensor readings
- 4. Store thermocouple readings
- 5. Store flow-rate readings
- 6. Calculate the power from stored sensor data
- 7. Visualisation of power output for each antenna
- 8. Have secure logon for raspberry pi's
- 9. Have a secure login system to database
- 10. Require sign in to Grafana dashboard

## Non-functional requirements

- 1. Simulate thermocouples
- 2. Have a test harness
- 3. Alerts for changes in power/temperature/no connection

## **Use Cases**

- 1. View all stored data readings for individual antenna
- 2. Monitor power readings for all antennas on site
- 3. View alerts
- 4. Acknowledge alerts
- 5. login to all systems