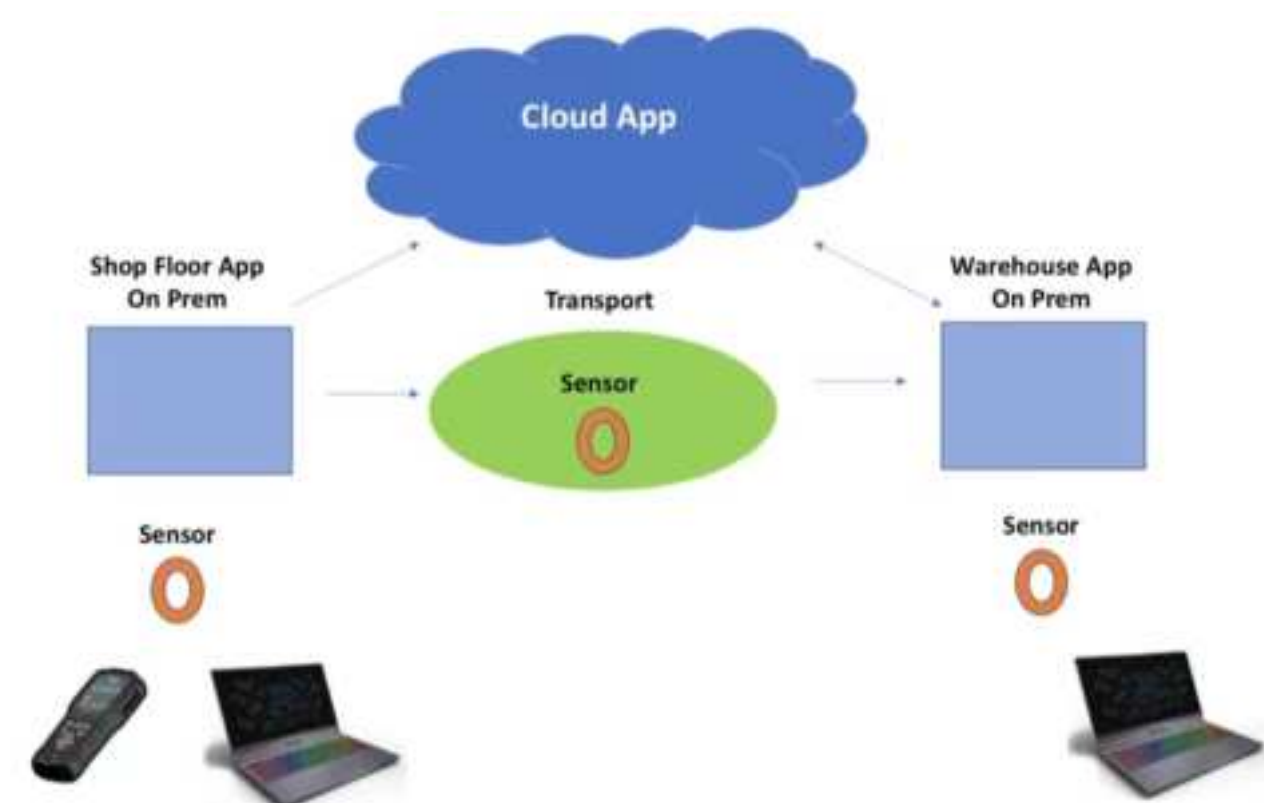# ARC CC SENSOR FLOW

SERSOR (3rd Party)

Chart

Phases

PreWork

- Sensor arrives from the source / supplier –
- Outsourcing to a Turkish company for the calibration with a certificate

Shopfloor

Activation
- Sensor will take out of a box / bucket (calibrated)
- Sensor will connect per blue tooth to the ARC CC application per long range blue tooth
- Sensor will be activated by shaking
- Operator scanning the box and scanning the QR code and the screen ARC CC app
- Now the sensor is linked to the box
- Operator but the sensor in the box
- Operator closes the box

Transportation
- Sensor is taking and reading the temperature in intervals
- Sensor is writing it to the memory on the sensor

Warehouse
Destination
- Box arrived at destination
- Operator opens the box
- Sensor will connect to the ARC CC application per long range blue tooth
- Sensor will transfer the temperature data to the ARC CC application
- The ARC CC application will check if the required temperature fresh hold was achiceved Y/N
- ARC CC application send information back to the sensor and indicated Y/N
- Sensor will blink green for Y and red for N
- ARC CC application now transferred the data to the cloud for audit and forensic analytics
- Sensor can be disposed

Required

Hardware
- Sensor
- Barcode Scanner
- PC or tablet (activation)
- PC, tablet or beacon (destination)

ARC CC Software
    Blue tooth long range (LBR)
- ARC CC application
    - On Prem ShopFloor
    - On Prem Warehouse

- Cloud / On Prem
  - Configuration
    - Setup
      - Destination
      - HW & SW Setup
      - Testing connectivity
      - Version control ARC CC app on premise
  - Upload the records after activation
    - Serial number sensor + box ID
  - Upload temperature data after destination
  - Reporting capabilities
- On premise activation
  - ARC CC APP on premise ShopFloor
    - Installation on Laptop or Tablet
      - WLAN , LBR
    - Registration of the sensor
      - Through "Shaking Sensor"
        - Connectivity through LRB Sensor to ARC CC app
    - Sensor information shows up on the screen of the Laptop / Tablet
    - Operator Scans Box and QR code on the screen to "marry the two"
    - This information will be uploaded to the cloud
- On premise destination Warehouse
  - ARC CC APP on premise
    - Installation on Laptop or Tablet
      - WLAN , LBR or beacon
    - Box arrives destination
      - Sensor connection through LRB with the device / ARC CC APP
      - Temperature Data are transmitted to the ARC CC APP
    - ARC CC APP checks the integrity of the data and send comes to a result Y/N
    - ARC CC APP send result Y/N back to the device per LRB
    - Sensor blinks Green or RED
    - Temperature information will from ARC CC APP on premise uploaded to the cloud
    - Reporting Analytics will be available through the Cloud App

- Easy VB application
  - Simple to operate
  - SQL Server

Application / Functionality Sensor Software

On Sensor functionality:

Setup

Activaion

      Shaking to activate

Storage

      Store:

             Timestamp

             Temperature

                  Memory: X Data String

Logic: if temperature larger than X = RED

Transfer   Long Range Blue Tooth

                To Device to the cloud

Application / Functionality Sensor Software

Setup:

      On-Premise application

           Configuration

           Basic Information

                Shopfloor Application

                    Settings

                Warehouse Application

                    Settings

        Cloud Applications

                Transfer Settings

Activation:

      On Premise application

      Shopfloor Application

          1sts Screen

              QR Code Sensor

          Scanning Box

          2nd Screen

              Status: Linked / Not Linked

Transfer:

      On-Premise Application

          Shopfloor

Transfer the sensor data to the Cloud

On-premise Application

Warehouse

Transfer the sensor data to the Cloud

Result:

Cloud Application

1st. Screen

Results

Statistic