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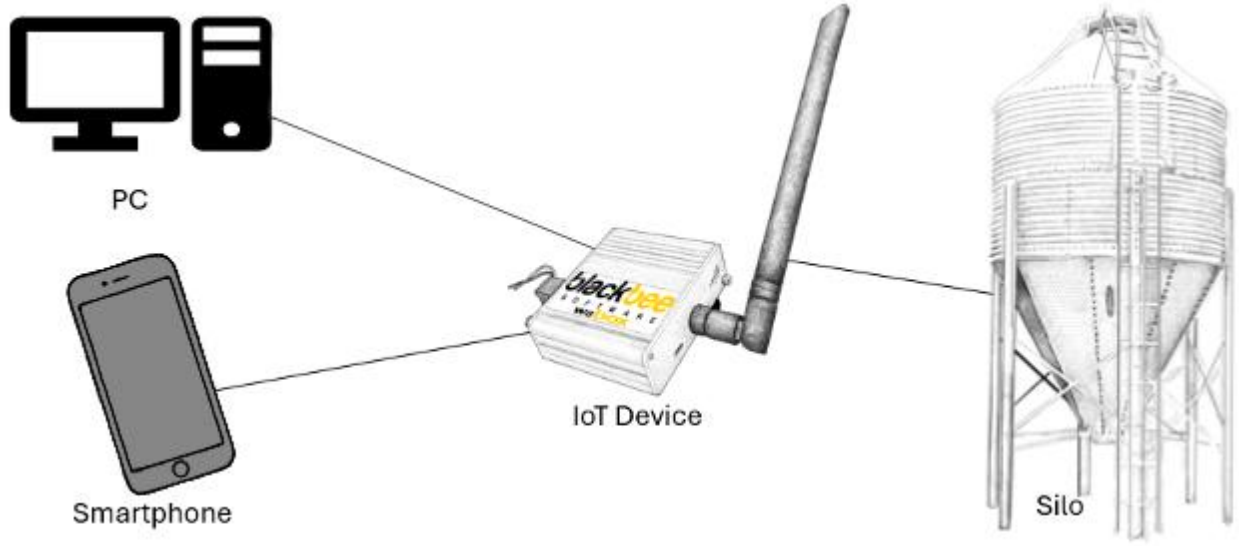
1 W8Bin Overview

Our **W8Bin** software makes use of IoT devices to remotely monitor data read from sensors or any other relevant hardware device. The IoT device is installed on site near the object that needs to be monitored. It reads a configuration file (created by an IT technician) which instructs the sensor when and how to read and save the data. It then uploads the data to a central database using 3G or Wi-Fi. The web portal is a website that is accessed by both the farmer and the feed company, where data is presented in various formats such as chart, tables and reports. These formats are used for forecasting, planning and decision making.



This layout provides a comprehensive overview of the setup process for an IoT device on-site. The IoT device is configured to connect with the silo sensor, allowing it to read weight data. This data is subsequently uploaded to the cloud, where it becomes accessible to clients through the IoT Bin Monitoring portal.

1.1 The following benefits are available to the farmer

- Remote access to the system via phone or office devices.
- Timely order placements, reducing the risk of running out of stock
- Use of data, charts, and reports to verify calculations or to calibrate and benchmark other systems.
- Email alerts to mitigate theft when feed is taken from silos.
- Verification of delivery quantities by comparing delivery slip weights with the actual quantities recorded by the system.
- Integration with additional sensors, such as temperature and humidity, to understand past feed conditions.

1.2 The following benefits can be outlined for the feed suppliers

- Utilise the system to monitor feed quantities at their clients' farms, enabling proactive monitoring of feed silo weights and timely client notifications when feed is needed.
- The feed company can optimise route planning by knowing the type and quantity of feed required and the delivery schedule.
- Leverage predictive analysis provided by the portal to determine the exact feed quantity needed on the delivery date to fill the silos to capacity, minimising wastage.
- Integration with additional sensors, such as temperature and humidity, aids in quality control measures by providing insights into the storage conditions of the feed.
- Order quantities are 100% accurate when using the system.
- Facilitate stock delivery at any time, day or night.

2 IoT devices

Here are a few examples of IoT devices and their key capabilities, primarily utilised in our W8Bin monitoring solutions across various sites:

TRB145

Capabilities:

- RS485 for serial communication
- 4G/LTE (Cat 1), 3G, 2G Connectivity
- Data to server capabilities like HTTP(S), MQTT, Azure MQTT, Kinesis
- RMS for remote troubleshooting

RUT956

Capabilities:

- RS485 and RS232 for serial communication
- 4G/LTE (Cat 1), 3G, 2G and WIFI Connectivity
- Data to server capabilities like HTTP(S), MQTT, Azure MQTT, Kinesis
- RMS for remote troubleshooting

TRB142

Capabilities:

- RS232 for serial communication
- 4G/LTE (Cat 1), 3G, 2G Connectivity
- Data to server capabilities like HTTP(S), MQTT, Azure MQTT, Kinesis
- RMS for remote troubleshooting

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