USER GUIDE
Factbird® Energy Monitoring - Siemens Energy Meter Solution

Introduction

The Factbird energy monitoring solution, which utilizes a Siemens energy meter, provides precise energy consumption data. The installation requires a shutdown and power-off of the machine due to the necessity of a direct connection to the machine's supply cables.
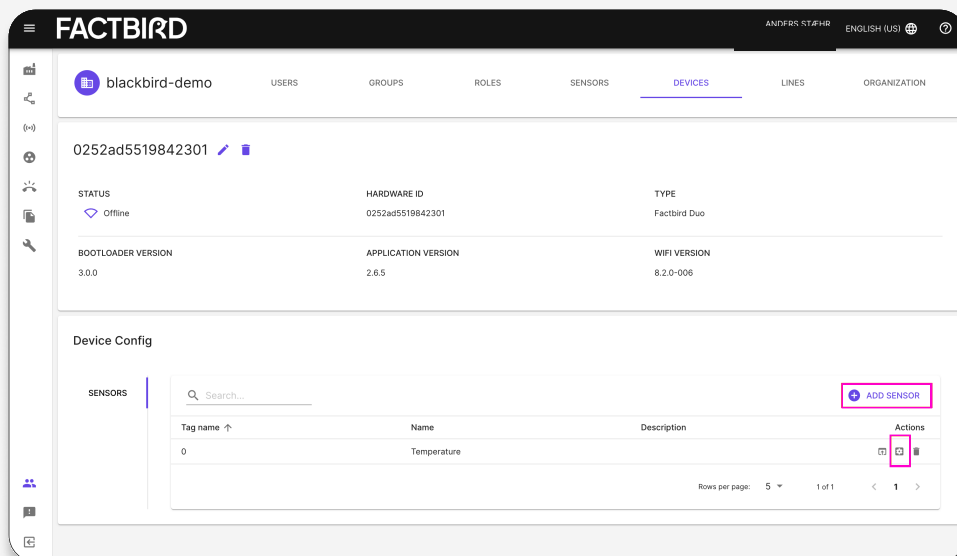
What are the benefits?

- **Energy data and performance data analysis in one platform**: Energy consumption data can be correlated and analyzed at the machine level alongside production performance data.

- **Standby consumption analysis**: Quickly identifies periods of high energy use even when systems are not active, helping to avoid wasteful standby consumption.

- **Detailed breakdowns**: Offers insights into energy use across different shifts, batches, and products, assisting in the granular analysis of power consumption.

- **Maintenance alerts**: Helps pinpoint when it's time for machine maintenance, aiding in preventive upkeep and avoiding larger issues down the line.

- **Cost reduction**: Utilizing the gathered data assists in making informed decisions to reduce energy waste and decrease operational costs.

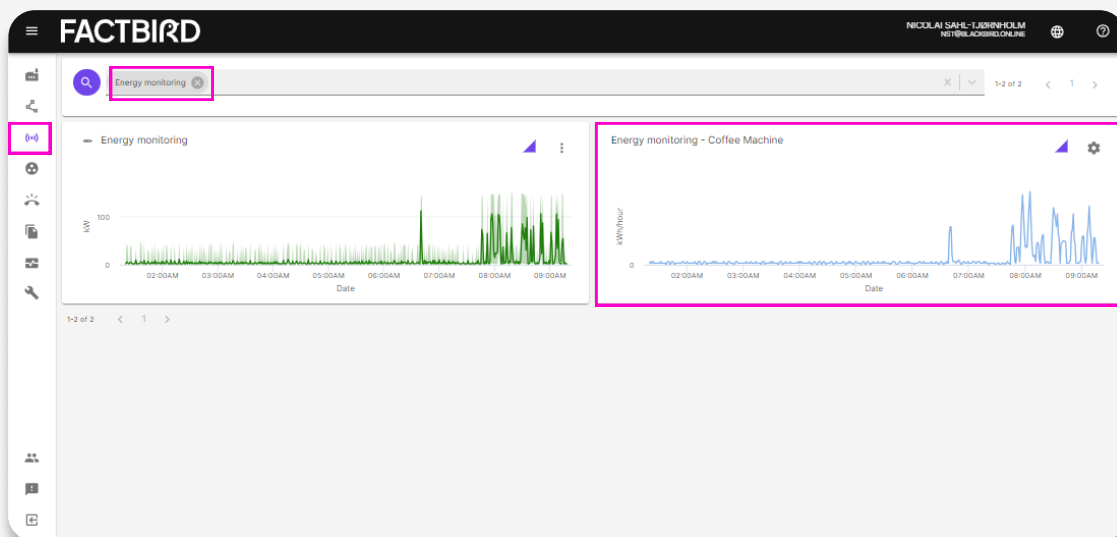## Getting started

1

Add a new sensor

- Go to 'DEVICES' in the 'Administration' page and find the device you wish to set up. Add a new sensor, or use an existing one if already in use.
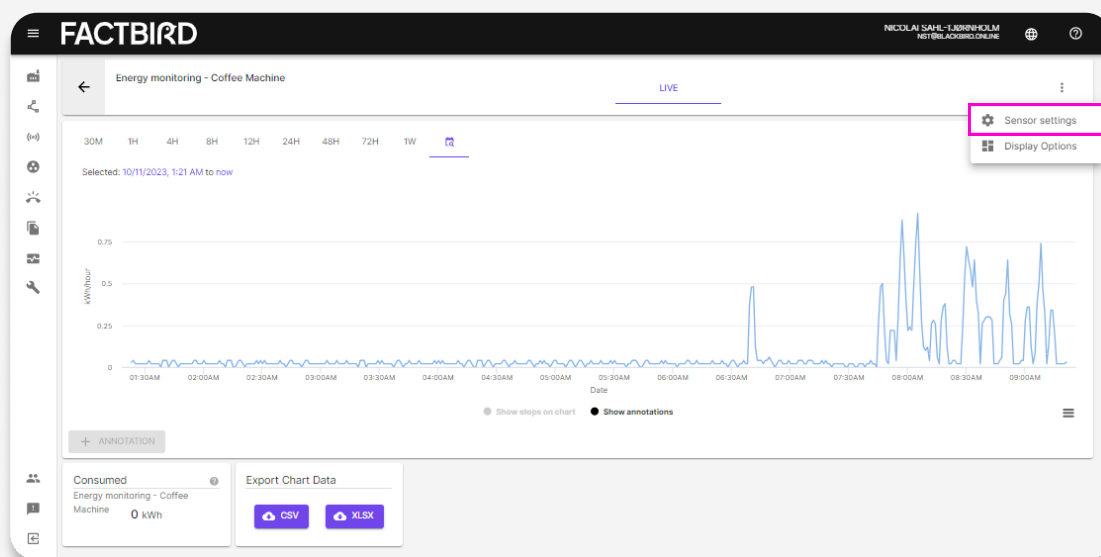
2 Open sensor settings

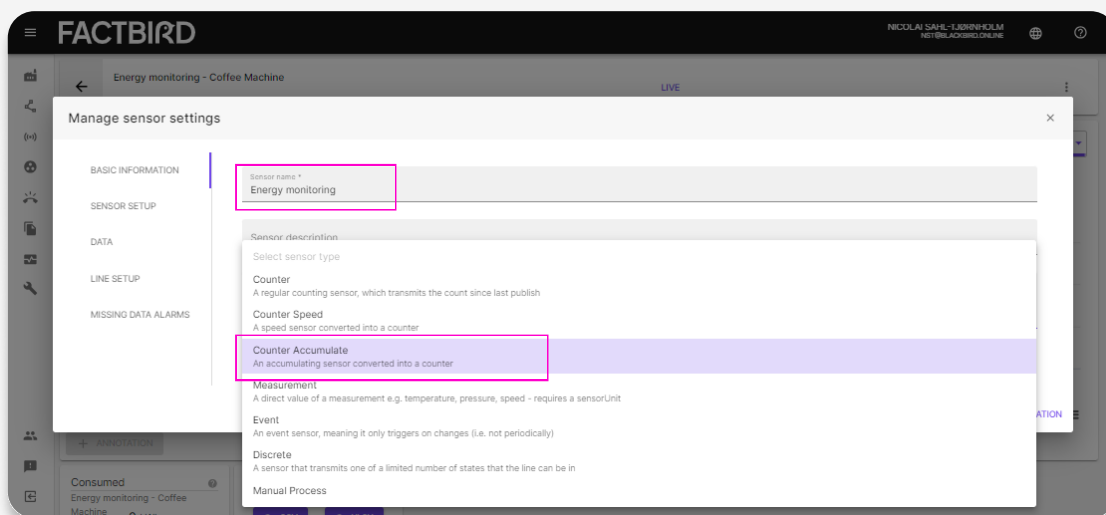- Find your sensor in the sensor overview by searching for it.

- Open up the sensor settings
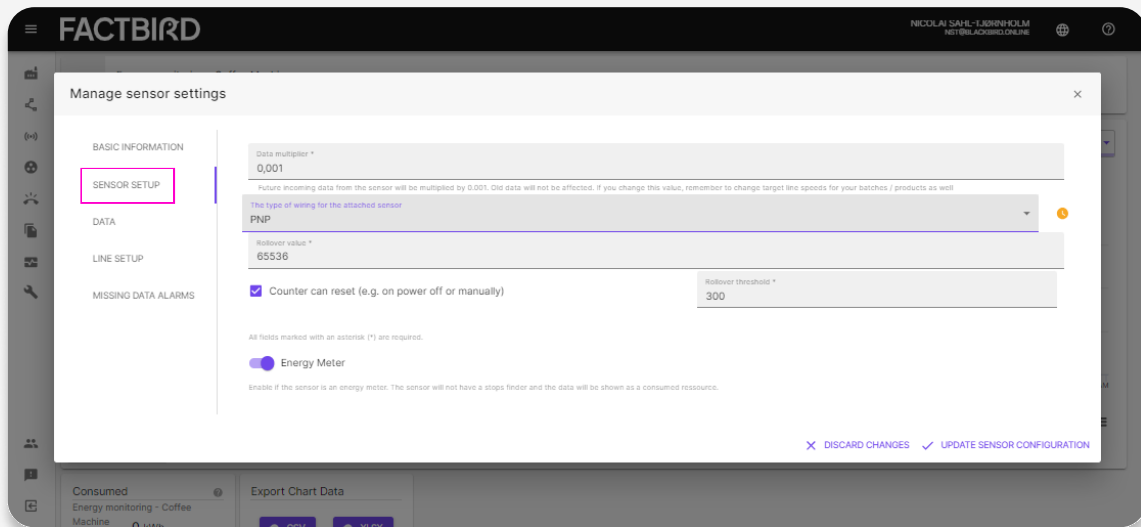
3

Configure the sensor - Basic information

In the "BASIC INFORMATION" tab, type in the Sensor name and choose "Counter Accumulate" from the drop down menu.

4

Configure the sensor - Sensor set up

- Go to the "SENSOR SETUP" tab

1. Data multiplier:
   - Direct monitoring: 0.001
   - Transformer monitoring: 0.01
        - The data multiplier is used to convert the energy meter's pulses into kW. For the direct energy meter, which pulses at a rate of 1000/kW, use a multiplier of 0.001 to scale to kW. For the transformer energy meter, which pulses at a rate of 100/kW, use a multiplier of 0.01 to scale to kW.
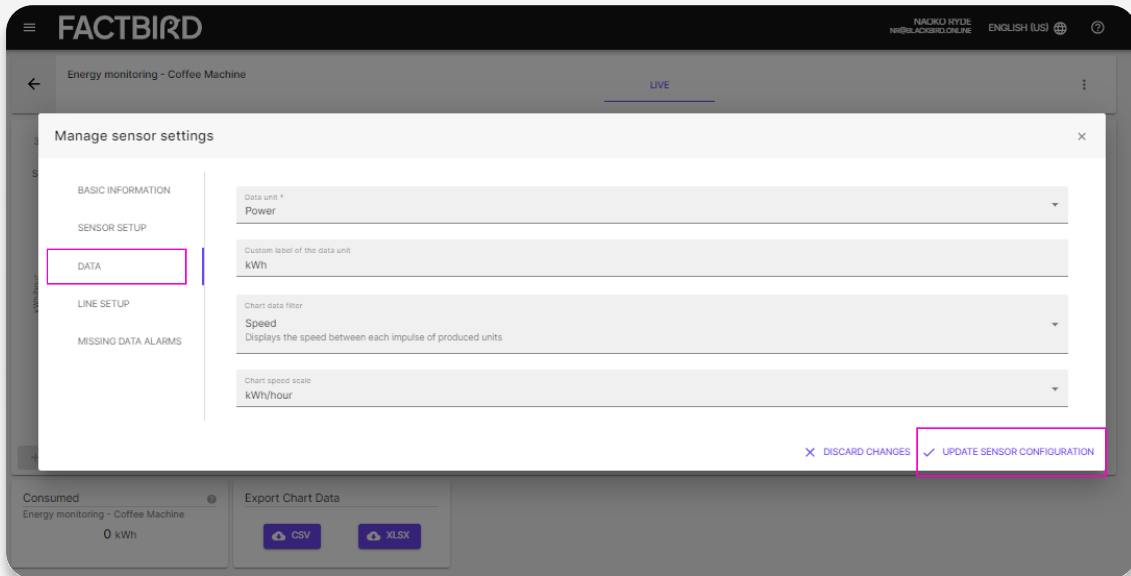2. Select "PNP" on "The type of wiring for the attached sensor".
3. Leave "Rollover value" and "Rollover threshold" as the default settings.
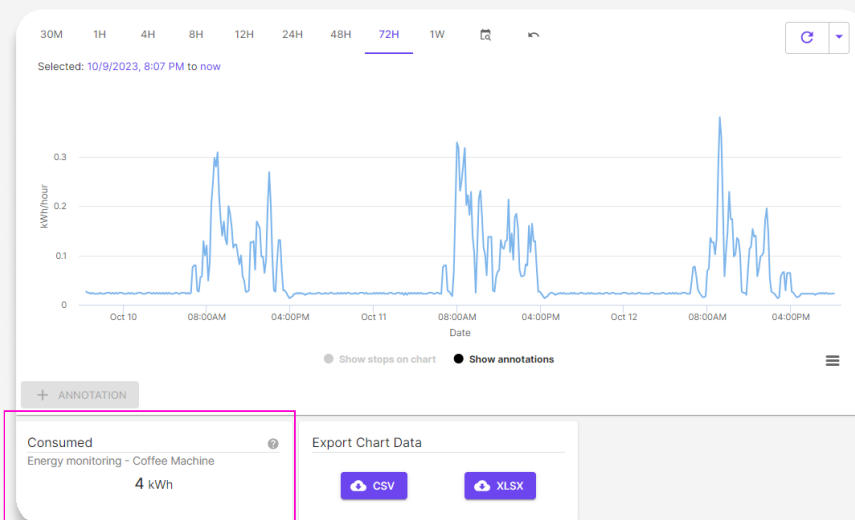4. Enable the slider for "Energy Meter".

5 Configure the sensor - Data

- Go to the "DATA" tab
- Select "Power" in the "Data unit"
- Type in " kWh" in the "Custom label of the data unit"
- Select "Speed" in the "Chart data filter" (recomended view)
- Select "kWh/hour" in the "Chart speed scale"
- Press "UPDATE SENSOR CONFIGURATION" to apply changes to the sensor setup.

6 Verify data on Live graph

- Go to the "LIVE" page of the sensor
- The energy consumption is visualized over time (displayed in kW).
- Below the live graph, the total energy consumed for the selected period is shown in kWh.
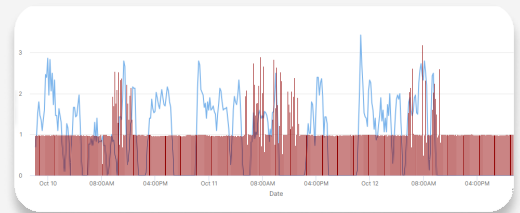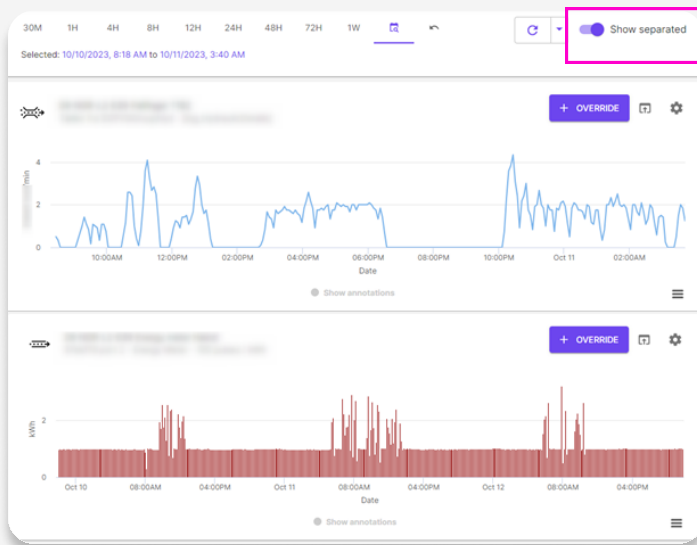
7 Analyze data

- Go to the 'SENSOR' page, analyze the correlation between the amount produced and the machine's energy consumption.
- Clicking slider 'Show separated' changes views for easier analysis.

8 Monitor KPI on the line live view

- In the 'Line' live view, there will be a KPI displaying energy consumption.