

Managing waste reducing insect farms from the cloud

Better Origin uses IXON Cloud Logging to monitor the effectiveness of their feeding program



Using insects combined with their patented technology, Better Origin is fixing the broken link in the food chain, reducing food waste and global emissions while improving health and productivity of farm animals. Better Origin have developed a fully autonomous, modular insect farm. Housed within standard shipping containers, the farm converts local waste such as agricultural residuals and industrial food waste into high quality insect protein for use as animal feed.

As they are often operating in remote, out of the way locations, having the tools and infrastructure to be able to monitor these systems remotely is essential. "The IXON 4G router has given us that capability," says Dave Roe, Lead Engineer at Better Origin.

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Monitoring the feeding program

Monitoring the health and feeding frequency of the insect larvae in the Rearing Module is crucial to overall performance. “We have deployed learning algorithms to optimise the feeding program, but monitoring the effectiveness of this is tricky, without physically being in the container and watching it,” Dave explains.



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With the help of IXON Cloud Data Logging they can verify the larvae performance. All the required data is automatically gathered and stored, without needing to be on site. “We can simply review the data at the end of the larvae cycle,” says Dave. “Using Cloud Logging, we managed to identify some problems with our processes in the early stages of the larvae life cycle, and were able to correct accordingly.”

Linking data to own purpose-built app

There’s virtually no data that isn’t logged from their PLC. “This includes all the sensor data from our feed production process, all the larvae rearing data, and internal data logic flags such as system alerts and operating modes,” Dave states. The gathered data is then linked to their own purpose-built app via the IXON Cloud API. “We do so to provide the best possible customer experience,” Dave points out.

Benefits the IXON Cloud offers

Better Origin:

- ✓ Monitor health and feeding frequency remotely
- ✓ Reduce site presence in early stages of deployment
- ✓ Time and costs savings on internal R&D
- ✓ Verifying larvae performance with Cloud Logging data
- ✓ Improved customer experience by linking data to their own app

Using IXON’s IIoT solution has saved Better Origin considerable time and expense internally, as they didn’t need to develop and deploy their own remote access and data logging tools. Additionally, it has cut down on the need for site visits to monitor performance, particularly in the early stages of deployment where configuration is most common. “I would say we have been able to reduce our site presence by at least 50% in that stage,” Dave confirms.

Data trending charts

