

Auto Weigher FAQs

Version: June 2024



About the machine

What is the Auto Weigher?

The Auto Weigher is an automated and remote weighing solution for simplified livestock management.



Automated and hassle-free weighing

Weigh more frequently without the extra trips through the chute. Less manual labour for you, less stress for your animals.



Impactful insights for improved performance.

Easily identify low performers with the help of easy-to-understand graphs. Make proactive management decisions sooner, saving you time and money.



Animal data at your fingertips.

Partial weight data is captured and then converted to full body weight. This data is then sent securely to the Cloud. Easily access animal data on your mobile or desktop.



Farm and cattle-tested.

Proven farm-tough and works with animal behaviour. The machine is engineered to withstand harsh farming environments.

Who developed it and where is it made?

As more farmers seek to harness the power of real-time information and data on farm, Gallagher Animal Management has partnered with an emerging cattle management business to unleash the benefits of remote weighing for livestock farms all over the world.

Irish-Canadian based **StrongBo AgriTech** has developed a remote weighing system which allows livestock to be weighed in paddocks, rather than having to walk into the yards.

The units are manufactured in Canada.



Is it accurate?

There has been significant industry research on the high correlation between partial weight and whole body weight of beef cattle.

It is more important to understand paddock/pen weights will differ from static/yard weights in a similar manner to when you weigh cattle and send them to the abattoirs or feed lot. Individual results will vary based on several factors like:

- How far the walk to the yards is
- How hot it is
- What type of feed they are on, etc.

For example, our end users may notice **'gut fill' variances** in individual animals of up to 10% on the same day. The algorithm smooths out these variances out into a repeatable, consistent number that they can compare to their yard weights and then sale weights.

StrongBo's field trials data have shown a +/- 5% correlation between Auto Weigher weights vs static weights.

How does the Auto Weigher know which animal it is weighing when there are other animals around it?

The average animal visit lasts several minutes. While the machine recognizes other RFID tags during this time, it is easy to pick up a dominant tag that belongs to the animal being weighed.

The logic in the software takes care of this. If there is any uncertainty in which animal the captured weight belongs to, that individual weight will not contribute to the data presented.

Will it weigh all of my cattle?

No; it will weigh a portion of the mob. Not every animal will be attracted to the salt or molasses.

The proportion of the mob the farmer/rancher will weigh is dependent on factors including but not limited to:

- mob size
- grazing area/pen size
- positioning of the unit
- the length of time the unit is with the mob.

As a guide, however, if allowed a week with a mob we have seen:

Feedlot pens with less than 150 animals	~70% of mob weighed
Pasture with smaller mobs (e.g. 80 animals) in smaller areas (~2ha)	~70% of mob weighed
Larger mobs in extensive pasture	Variable, but at a minimum 20%

How soon before I can see live weight information in my dashboard?

Animals' weights (a portion of your total herd number) will begin to show on the dashboard within several hours of the animals weighing themselves. In some situations, we have seen live weight data come through in under 48 hours.

There is a range of management factors that influence how many animals are weighed such as: the mob size and grazing area/pen size (**refer to slide/section "Will it weigh all of my cattle"**). Typically, you will have the mob average accurate as soon as you weigh 30+ animals*, similar to when you weigh cattle in the yard.

Mob ADG weights are based on a 7-day average and generally take 7+ days before appearing. While we are capturing and recording the individual animal weights as soon as they step on the platform, we need to wait around 7 days for the ADG data to pull through on the dashboard. The longer the machine is with a mob, the more accurate they become.

*Statistically speaking, sample sizes equal to or greater than 30 are often considered sufficient for the Central Limit Theorem to hold - We have observed this to be true in cattle of similar age/sex as they generally fit a bell-shaped curve.

Central Limit Theorem explained:

Let's say you start weighing each animal. If you plot all those weights on a graph, you'll see a bunch of different points all over the place, because each animal is different.

If you keep weighing your animals and calculating the average weight repeatedly, something cool happens: Even though each individual animal's weight might be all over the graph, the weight data tends to settle around a certain point or value. It's like most of your cattle end up having an average weight that's pretty consistent.

That's what the Central Limit Theorem is about. It's saying that if you take a bunch of different measurements of your cattle, those averages will tend to follow a predictable pattern, even if the individual measurements are all over the place.

Does it work on cellular or satellite?

It has cellular connectivity **and** is hardware-ready for satellite.

This dual communication mode will give our farmer end users peace of mind knowing they can weigh their animals even in the most remote location.

Switching from cellular to satellite (or from satellite to cellular) will not require any action from the end user. We have automated the process so it will all look seamless from their end!

How often does the app update with livestock data?

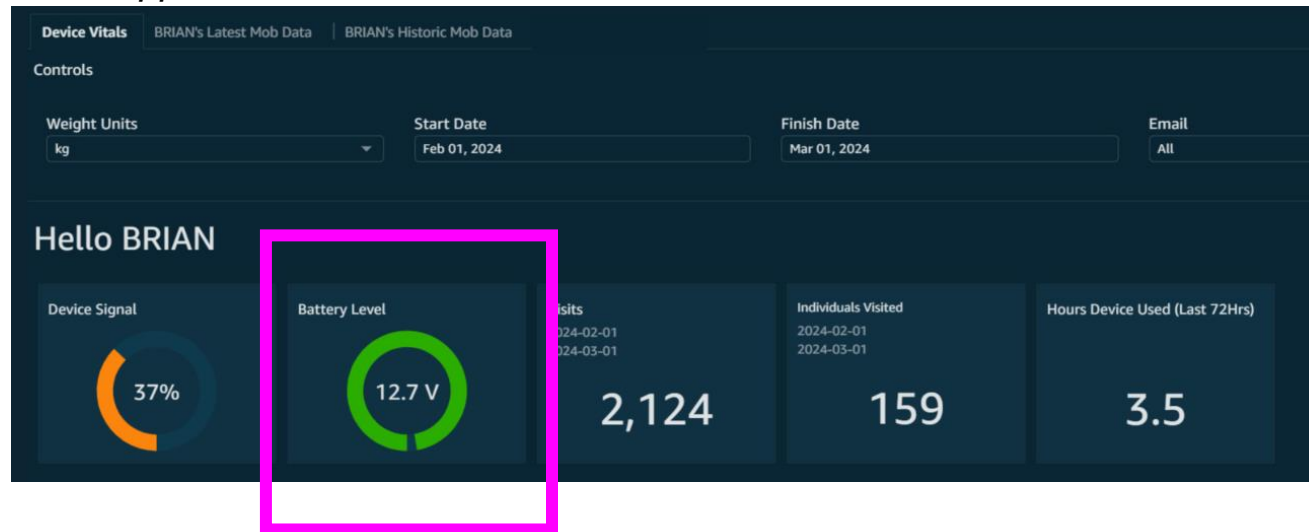
The information on the app will update periodically throughout the day. Checking the app once a day should provide our farmers and ranchers with the data they require. Please note that we are reliant on the animals weighing themselves, so it will likely be around 3 days before the machine has weighed enough animals to provide useful information.

How is it powered?

The Auto Weigher is powered using a 12V battery and the integrated solar panel ensures that the battery is always charged and operational.

The Web App displays the battery status.

Web app



Where should I place the machine?

Where it is most accessible and visible to the animals. Think water points, stock camps and other high traffic areas.

Getting the animals used to the machine in smaller areas can speed up the learning phase and will help encourage them to interact with the machine, which means the farmers/ranchers will get live weight data sooner.

Does it mess up pasture?

If left in the same place for an extended period of time, some pasture damage will occur, particularly during wet weather. This can be managed either by shifting the machine frequently or by placing close to existing 'high traffic' areas such as water troughs and gateways.

Consider backing the machine up to a fence so the animals do not continually walk around it. If an extended period of wet weather is forecast, the machine can be moved from the mob and re-introduced later. The data flow will continue from where it left off (i.e. resuming a session).

How does it work

How does it work

1. Assemble and commission the unit as per the supplied Quick Start Guide. Take the unit to your cattle; it is highly portable and set up only takes a few minutes.
2. Put an attractant like a salt block or molasses in the integrated trough which will entice the animal to voluntarily step on the platform.
3. The integrated EID reader identifies the animal. The Auto Weigher **samples the weight applied onto the platform** and an algorithm converts this to an estimated full body weight.
4. The **collected EID and full body weight data** are then transmitted to the cloud and information is sent to the app.
5. View the data on the app. It displays easy-to-understand data such as individual or group weights and growth over time reports.

The machine and animal behaviour

Will the cattle wreck it or tip it over?

Not ordinarily. The machine is almost fully constructed of galvanized steel. It is heavy, relatively wide, and has a low centre of gravity. When deployed, the wheels are off the ground taking no load and acting as stabilisers. The machine was also designed to minimise leverage points, which helps prevent cattle from tipping it over or causing damage.

Will my cattle rub on it?

To an extent, yes. The machine has been designed so it's safe for cattle.

Cattle-rubbing is actually an important part of them becoming used to the machine. Cattle who have never seen it before begin weighing themselves more quickly on a machine that looks and smells like it's been used by cattle before!

Do you see dominant animal behaviour?

The behaviour seen when introducing the Auto Weigher to cattle will be similar to introducing the same lick or attractant without the machine. Dominant animals are generally the first to use the machine.

Some animals use the machine several times a day, while others use it once a week or not at all. The dominant animals train the rest. As all animals require food and water at some stage, they cannot occupy the machine entirely as they also need time to eat and drink.

Are there any tips for success?


It takes time for the cattle to get used to the machine, but there are ways to encourage them to interact with it sooner, such as:

- Placing the unit near a water source
- Sizing up the paddock or pen size in relation to the size of the mob
- Trialing different attractants and regularly replenishing them

The App

Account Creation and Commissioning

9:41



StrongBo
Brought to you by Gallagher underneath

Login

Sign up

9:41

←

Hello! Register to get started

John Smith

Last name |

Email

Password

Confirm Password

Mobile Phone

Default weigh unit

I agree to the [Terms and Conditions](#) and [Privacy Policy](#)

Sign up

Already have an account? [Login Now](#)

9:41

←

Verification code

A verification email has been sent to your email address


1 2 1 2 |

Verify

Didn't received code? [Resend](#)

9:41

← Connecting



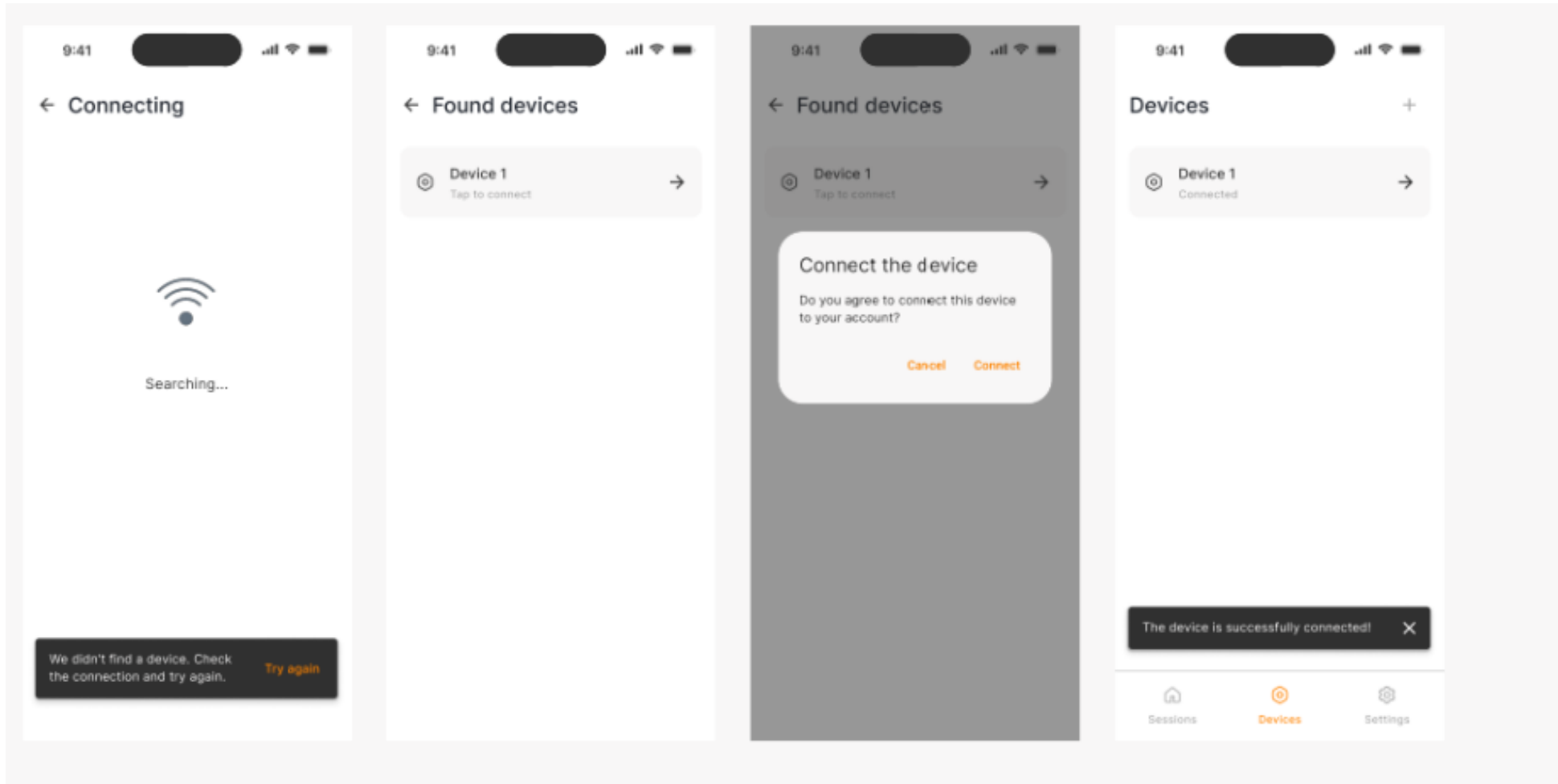
Let's connect device

- 1 Turn on bluetooth
- 2 Turn on device

Start →

[Skip for now](#)

Account Creation and Commissioning



Data at your fingertips

9:41

Sessions

Filters

Devices | Emails

- Unknown session
25 APR 2024
- West Hill Paddock 1.0
15 APR 2024 - 15 APR 2024
- West Hill Paddock 1.0
10 APR 2024 - 15 APR 2024
- West Hill Paddock 1.0
5 APR 2024 - 15 APR 2024
- West Hill Paddock 1.0
01 APR 2024 - 15 APR 2024

Sessions | Devices | Settings

Session info

Session name: West Hill Paddock Test Session

Status: Active

Session start date: 15 APR 2024

Session end date:

Number of head: 100

Breed: Abergele cattle, American, Amrit Mahal, Ayrshire

Sex: Lorem

Age: 1-5

Weight range: 50-100

Pen type: Lorem ipsum

9:41

← Session

West Hill Paddock Test Session

25 APR 2024 kg lb

Latest session disributon

Weight (kg)	Count
10	2
12	3
14	4
16	2
18	2
20	1
22	3

Session average: 438

Session animals weighed: 73

ADG: 0.75

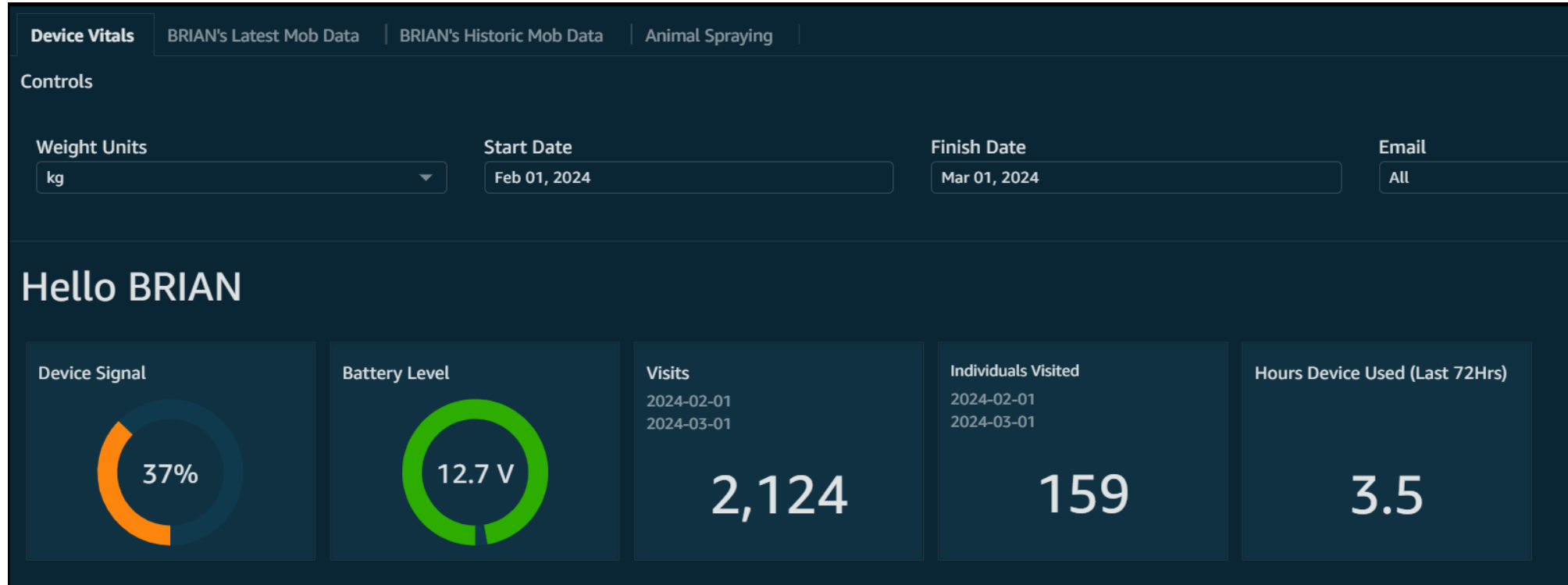
Animals | Sprayed animals

Date	Animal	Weight
Cell text A1	Cell text B1	Cell text C1
Cell text A2	Cell text B2	Cell text C2
Cell text A3	Cell text B3	Cell text C3
Cell text A4	Cell text B4	Cell text C4
Cell text A5	Cell text B5	Cell text C5

Date | Animal | Weight

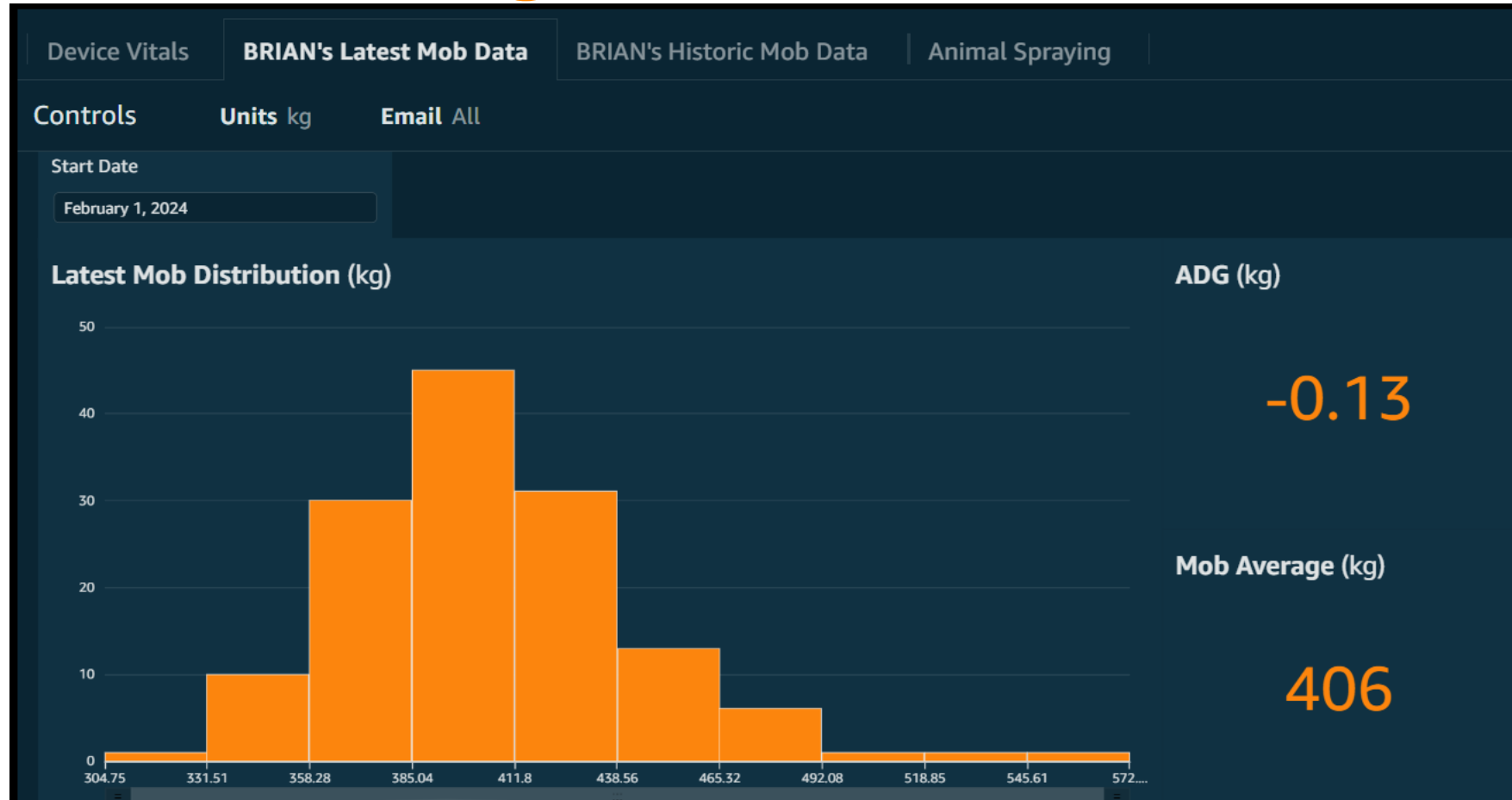
Sessions | Devices | Settings

View device status in an instant



- ✓ Easily export weight data for integration to 3rd party apps
- ✓ Csv or xls formats

View mob performance and identify outliers at a glance



Go granular with individual weight data

And easily export to csv or xls formats for integration into 3rd party apps

The screenshot shows a web application interface with a dark blue theme. At the top, there are navigation tabs: "Device Vitals", "BRIAN's Latest Mob Data", "BRIAN's Historic Mob Data" (which is selected), and "Animal Spraying". Below the tabs are "Controls" for "Units kg" and "Email All". A text block explains that the page is used to look at animal data between two points in time, with instructions to select start and finish dates. Below this, there are two date input fields: "Start Date" set to "February 1, 2024" and "Finish Date" set to "March 1, 2024". The main section is titled "Animal Data" and includes a note: "Weight Color corresponds to confidence in weight value." Below this is a table with three columns: "Animal ID", "Date", and "Animal Weight". The table contains eight rows of data, with the weight values highlighted in green or orange based on confidence.

Animal ID	Date	Animal Weight
982123515239501	Feb 22, 2024	377
982123797540096	Feb 21, 2024	418
982123771668330	Feb 20, 2024	419
982123797947025	Feb 19, 2024	411
982123786349444	Feb 16, 2024	524
982123786349452	Feb 16, 2024	481
982123786349458	Feb 16, 2024	432
982123786349460	Feb 16, 2024	493

How often is the animal data on the app refreshed?

The information on the app will update periodically throughout the day. Checking the app once a day should provide you with the data you require. Please note that we are reliant on the animals weighing themselves, so it will likely be around 3 days after introduction to a new group before the machine has weighed enough animals to provide useful information.

What support is available to end users after purchase?

Support will be available through the Gallagher sales & distribution network.

We can run remote diagnostics on machines provided the unit is powered and has connection.

StrongBo have designed and built this system to make it as easy to use and maintain as possible. All electronic parts are modular and 'plug and play'.

Replacement parts:

AU only: Order replacement parts from resellers. Gallagher Customer Support and the local Territory Manager can assist end users with the process. Please note freight costs may be incurred.

Elsewhere: Replacement parts can be ordered directly from Gallagher. Please note freight costs may be incurred.

Repair requests:

Contact Gallagher Customer Support for repair requests.

Software updates:

Auto Weighers within cellular coverage will update automatically without any input required from the end user.

Auto Weighers that are outside of cellular coverage (and therefore in satellite range) will in the future be able to update via Satellite.

Support for End Users

Gallagher Tech Support Team can run remote diagnostics. They can provide support around:

- Hardware
 - Connectivity
 - Weighing session
 - Subscription and data management
 - And other general queries
-
- Our Technical Support Team can also send remote updates to resolve most issues.

New Zealand: 0800 731 500

Australia: 1800 425 524

United States: 1800 531 5908

Canada: 1800 531 5908

Chile: +56 64 226 0402

Brazil: +55 6699 660 0496

LATAM: +56 9 3920 1844

Rest of World: +64 0800 731 500

What's the warranty on the machine?

Warranty period is 2 years.

The warranty begins from the date of purchase from Gallagher or a Gallagher-approved distributor or reseller.

