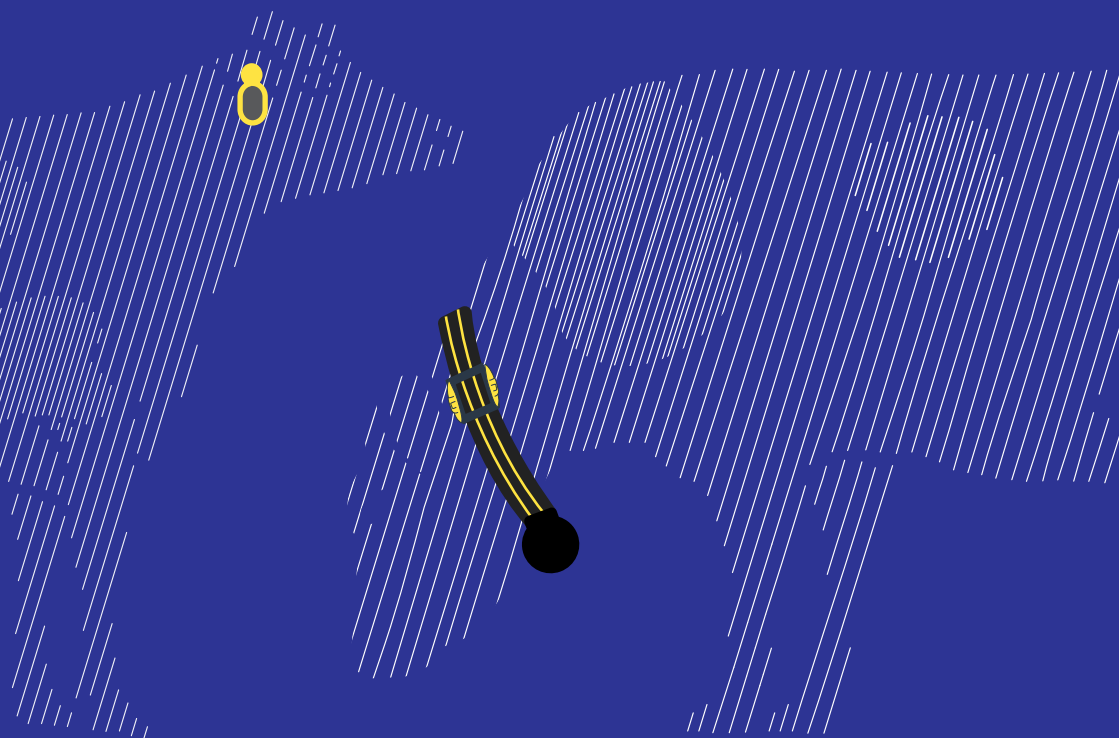# Tru-Test™
DATAMARS

Automated
Heat and Health
Monitoring

with Active Collar and Ear Tag

Accurate heat and health detection for peace of mind

Save time

with simple, easy, intuitive installation.

By your side 24/7

thanks to full access, any time, for an unlimited number of users.

Reduce stress

and get peace of mind, while Active Tag does the monitoring.

Focus on other tasks

while we do the monitoring, giving you more freedom.

Effective breeding programs for a good night's sleep

Timely and accurate information allows you to align insemination and mating with peak heats, giving you the best chance for a cow to get in calf at her earliest cycle and maximise production. Increase early and accurate heat detection with world-class precision by using Tru-Test's automated smart technology to monitor animal behaviour in and outside the dairy 24/7.

Accurate heats are detected faster and with greater certainty and even less expressive heats may be detected. Dairy farmers can be alerted in real time and prior to cows entering the dairy shed.

Improved staff wellbeing

Help your staff to perform at their best with the right information at their fingertips, giving you peace of mind that everything is in hand. And if there is a problem, mobile alerts allow issues to be proactively detected and sorted - quickly and effectively.

Advanced insights & easy-to-understand intelligence

All animal behaviour data is captured and processed with advanced computational and machine learning methods to provide accurate heat and health insights.

Like all Tru-Test solutions, Active Tag is grounded on accurate, reliable measurements to streamline activity and deliver timely, easy-to-understand intelligence straight to the fingertips of producers.

See how animals are performing via simple graphs and charts.

Automatically receive heat information as cows come into a 500 metre range of the data gateway (mounted at the dairy shed/site).

Instantly share data with staff, vets or consultants, without emailing.

Access your data from any device with an internet connection with Datamars Livestock Live cloud software.
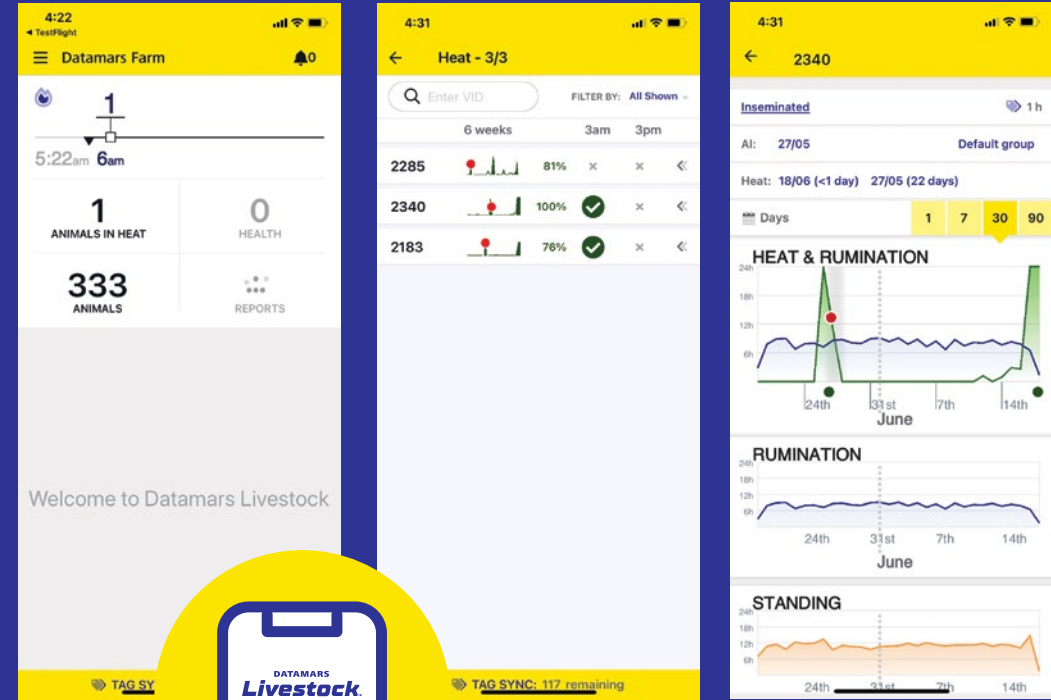
Compatible with Auto-drafters.

Monitor heat and health from wherever you are

See how animals are performing via simple graphs and charts.

View heat and health data history on individual animals or groups.

Easily print or download reports and graphs in common file formats.

Download on the App Store

GET IT ON Google Play

Highly accurate heat detection

Tru-Test Active Tag improves the efficiency of farm breeding programs, making it the most accurate heat detection product on the market today.

Reproduction plays a key role in the efficiency of any dairy herd. It can be one of the major costs of production and is also an area where significant improvements can be made. Poor dairy herd production has many consequences including:

- **Lost production**
- **Longer calving pattern**
- **Unnecessary culling**
- **Missed opportunities for genetic gain**
- **Increased stress on the farmer from poor in-calf rates**

Tru-Test's Active Tag uses industry leading hardware and software to determine animal behaviour. Uniquely, the cow is compared to her own history and to the group's activities for more accurate and timely heat detection.

We monitor:

- Standing
- Lying
- Ruminating
- Feeding
- Resting
- Group behaviour and 22 other individual features

Benefits:

- Save time normally spent doing visual heat detection
- Increase submission rate and utilise optimal time of AI to improve breeding

Outcomes:

- Increase days in milk by eliminating extended dry periods
- Identify anoestrus and cystic cows early, improving the ability to intervene and make a difference
- See the reproductive status of a herd quickly and easily to understand what stage you're at in the breeding season
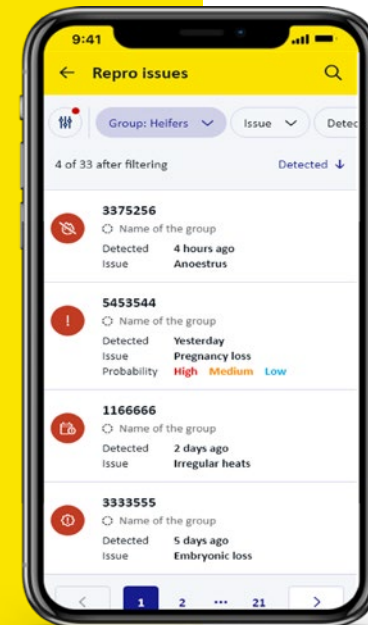- Identify potential abortions early

Find your problem cows

Repro issues impact a cow's ability to get back in calf, costing you time and money.

Active Tag monitors your cows 24x7 for the hard to spot issues like:

- **Anoestrous**
- **Irregular heats**
- **Pregnancy loss**
- **Embryonic loss**

With our continuous monitoring, we're the first to know when these exceptions happen on your farm. We'll notify you of each issue. You can then draft the animal to inspect and act.

Better animal health 365 days a year

Identifying and monitoring health conditions and disease at an early stage is important, as evidence shows that health and reproductive performance are closely linked.

The effects of health problems can persist through the entire lactation and have a profound effect on the animal's overall fertility and production.

Tru-Test Heat and Health Monitoring solution monitors both the reproductive and general health of the animal, sending an alert directly to the farmer's phone when there is a negative variance from the cow's normal activity.

We monitor:

- Standing
- Lying
- Ruminating
- Feeding
- Resting
- Group behaviour and 22 other individual features

Benefits:

- Faster recovery rates
- Reduced cull rates
- Reduced veterinary costs
- Reduced usage of antibiotics
- Monitors animal response to determine treatment effectiveness
- Detects illness – pneumonia, mastitis, ketosis, metritis, lameness, photosensitivity and DA's
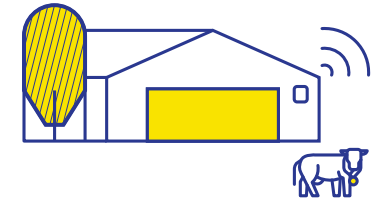
How it works

1

Multi-metric analysis on each individual cow's behaviour to monitor estrus and health activity.
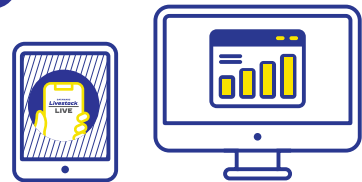
2

Individual cow behaviour is recorded 24/7 and linked to each animal's EID tag.
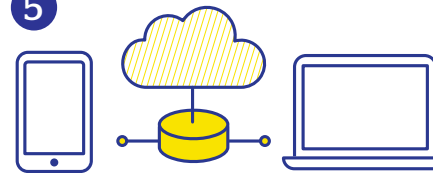
3

Data is automatically uploaded to Datamars Livestock Live any time an animal is within 1,000 metre of the gateway mounted at the dairy shed.
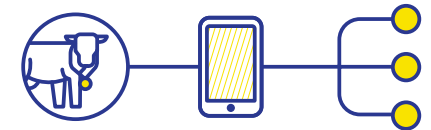
4

Insights are accessible via the web or mobile app and displayed on an easy-to-understand dashboard.

5

Access data from almost anywhere. Datamars Livestock Live is a cloud-based online program so your on-heat data is accessible from any device with an internet connection.

6

All behaviour data, heat and health insights are integrated through Datamars Livestock Live and can be easily shared with third parties including veterinarians and AI technicians.

Active Tag Products

Durable, lightweight and battery-operated.

Collar Tag

Weight:
850g

Dimensions:
~79.6mm x 69.6mm x 31mm

Collar strap:
40mm width

Battery life:
Up to 8 years

Light indicator:
LED

Reading distance to Farm Gateway:
Up to 1,000m

Remote firmware upgrades

Reusable

Ear Tag

Weight:
25-30g

Dimensions:
~36.9mm x 14.5mm x 68.4mm

Tagger:
Compatible with Z Tags male tags
and No-Tear-Tagger™
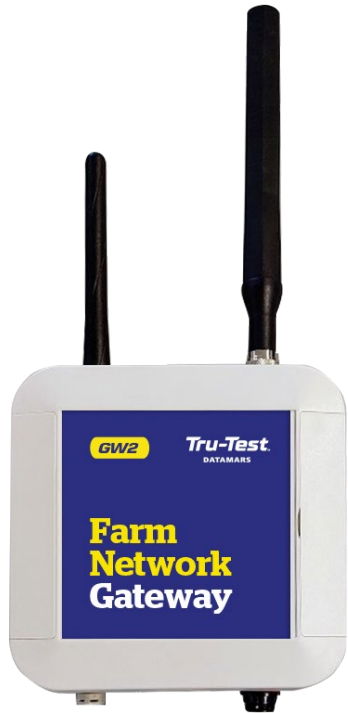
Battery life:
Up to 4 years

Light indicator:
LED

Reading distance to Farm Gateway:
Up to 1,000m

Remote firmware upgrades

Reusable

Farm Gateway

Best-in-class technology platform

Dimensions:
120mm x 120mm x 20mm

Transmission:
Up to 1km, 360 degree, line-of-sight
data transmission

Number of animals:
Full coverage for up to 5,000 animals
per Gateway

Communication:
Auto-synchronizing, overlapping Gateways
to maximise coverage

Real-time communications via LTE (4G)
or WIFI

Support at every step

Once you purchase our Tru-Test Active Tag solution, we won't leave you high and dry at the farm gate. We'll partner with you to improve your business outcomes, helping you at each step to integrate the technology into your business.

Tru-Test Active Tag is supported by Agtrac, a Datamars subsidiary and trusted expert service and support provider, and Datamars Livestock specialists.
agdata@datamars.com

Plus, our 24/7 online Help Centre gives you answers to your questions when you need it, no matter where you are.
support.livestock.datamars.com

WORLD CLASS
SUPPORT
DATAMARS
Livestock

Collar technology improving herd reproduction performance

When Jersey breeders and farmers Michelle and Shaun Good were seeking to better protect their herd they turned to Tru-Test technology to help maintain and improve strong reproductive performance.

For pedigree Jersey breeders Michelle and Shaun Good, their steeply contoured Otorohanga farm has been home for six seasons. Last year the couple added a nearby leased property and a new run off to form a second milking platform. They have 800 mainly Jersey girls – a 400 cow commercial herd and a similar sized high BW pedigree herd which has supplied a number of bulls to the AB industry.

"We've put so much effort into building the genetics of our herd, we really wanted to protect that," says Michelle. "Our thinking was that we needed some form of technology to support our business growth and to simplify operations while maintaining our strong reproductive performance. The first step was to seek out collars to detect heat at least as well as we can, ideally better."

After scanning the market for nearly two years, the couple identified smart collars — and a list of non-negotiables beyond the core function of accurate and reliable heat detection. These nonnegotiables were seamless integration with their herd management system MINDA records to avoid updating multiple systems, a clean, easy-to-use interface with easy-to-interpret information, and an overall cost-effective solution with responsive support.

Michelle and Shaun opted for Datamars Livestock's Tru-Test Active Collar Tags and added on an Autodrafter and Walk over Weighing. The Tru-Test Active Collar Tags monitor cow behaviour and movement 24/7 to give an indication of when each animal is on heat with 99% accuracy.

An initial hurdle was full farm coverage which was necessary to ensure every cow is monitored day and night. Hills, gullies, and nooks are common in the central North Island creating dead spots on farms that many systems couldn't deliver on without expensive infrastructure. Michelle says Datamars came back with a cost-effective solution.

That clever problem solving, the collars themselves, and the commitment to continued algorithm development to increase insights from their on-farm data made Datamars a clear winner.

For the first six weeks of using the collars, the couple did paddock checks and used tail paint and scratchies to compare with the collar insights and make sure the collars were working as they expected.

> *"Technology helps support herd improvement. That is how we see the collars and Datamars Livestock fitting in to our business."*
>
> **MICHELLE GOOD**

The collars have also picked up a few animals that Michelle and Shaun would have otherwise missed. "To date, there have been three or four animals that fall in that space that the collars have picked up and we otherwise probably wouldn't have mated. That is just in those first few weeks of mating. We hope to pick up more of those animals and end up with a lower empty rate."

High-end embryo transfer work which the Goods employ throughout the AB period to fast track their genetic improvement provides another validation point for the Tru-Test Active Collars.

Before embryo placement, all potential surrogate cows have their ovaries scanned to make sure the cow has had a really good cycle, and everything looks good.

"The collars have reliably identified cows which would make the best recipients for embryos — cows which have really long and strong heats. Information from the collars has been predominantly in sync with the ovary scans. It's been an unexpected bonus to pick the best recipients for the ET work using the collars and we hope it will result in a higher conception rate."

There are a number of other savings too. Paint, scratchies, and paddock checks, all added time and cost to the Good's operation previously. Another saving may be pregnancy scanning. The Good's do two scans each year but say if collars can accurately tell them when animals are still cycling beyond the mating period, then scanning maybe a thing of the past.

"Long term impact of the collars is about making our business more efficient. Hopefully, they will help our focus toward herd improvement. The more cows we get in calf, the more we can pick up health issues before they become clinical, and the more we can monitor and oversee our herd the more options it gives us around breeding and discretionary culling so we can improve our herd."

Michelle believes technology such as what she and Shaun are using is important for the whole industry, not just their farming operation. "Technology helps support herd improvement. That is how we see the collars and Datamars Livestock fitting in to our business."

Michelle says she is looking forward to reaping the value the combined data that Tru-Test Active Collar Tags and Tru-Test Walk Over Weighing will deliver over the coming seasons.
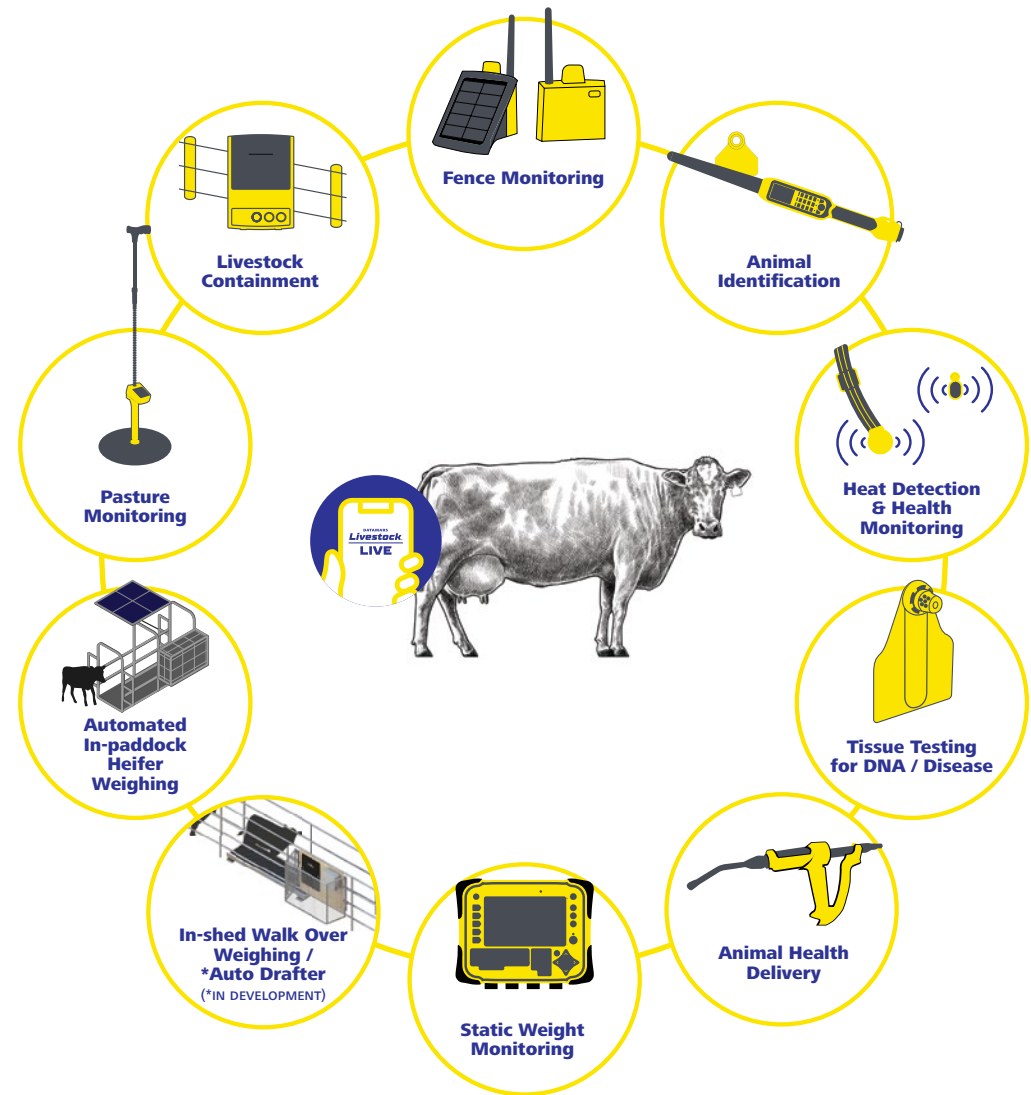
Trust Tru-Test

Tru-Test, part of the Datamars Livestock stable, has a longstanding reputation of delivering accurate performance data with over 60 years of bringing dairy and livestock innovations to market.

We have a world-class reputation for developing rugged reliable hardware and world-class smart technology for better farm decision-making and on-farm profitability.

Like all Tru-Test solutions, Tru-Test Active Tag is backed by extensive global trials across pasture and barn operations, utilising machine learning algorithms.

BetterHerd

Our integrated dairy portfolio

Fence Monitoring

Livestock Containment

Animal Identification

Heat Detection & Health Monitoring

Pasture Monitoring

Tissue Testing for DNA / Disease

Automated In-paddock Heifer Weighing

Animal Health Delivery

In-shed Walk Over Weighing / *Auto Drafter (*IN DEVELOPMENT)

Static Weight Monitoring

Tru-Test™

DATAMARS

dairy.farmingmadebetter.com

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