



SenseHub[®] Dairy

Farm with more freedom



Next steps

To find out more about how SenseHub could improve the productivity and profitability of your herd, please visit www.uk.sensehub.com or contact us on 01207 529000 or email: SenseHubGB@msd.com



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What is SenseHub?

The SenseHub livestock monitoring system puts you in control of your dairy herd. With real-time heat detection and early warning health alerts, SenseHub enables you to quickly and reliably make better decisions to increase your herd's fertility performance, maximise productivity and avoid impending health problems.

By using real-time data, SenseHub takes the guesswork out of dairy herd management by accurately and reliably assessing the current health and fertility status of individual cows, heifers and groups of animals to save you time, money and hassle.

State-of-the-art capabilities can be customised to create a comprehensive picture of animal status across the production cycle:

- ✓ **Whole-life behavior monitoring** enables more targeted and timely interventions to improve reproduction, health, nutrition and well-being – for the lifetime of the animal.
- ✓ **Integrated milk monitoring** gives you more control over milk yield and quality.

Animals in heat or needing attention are identified, often before visual detection is possible, enabling you to plan your working day more effectively.

The system saves you time by 'watching the cows 24 hours a day' and acts as an early warning system with animal health and heat alerts sent direct to your phone.



SenseHub is simple to operate with easy to understand graphs and tables which can be viewed on PC, tablet and smartphone.



Please note: Tag numbers have been obscured throughout this brochure for regulatory reasons.

How SenseHub works

SenseHub offers the choice of intelligent monitoring ear tag or monitoring neck tag, both of which use advanced electronics to constantly measure subtle activity and behavioural patterns associated with fertility status and rumen function to determine when cows and heifers are in heat, when they are showing irregular heat patterns, or to provide an early warning of behaviours related to ill health or distress.

Monitoring Neck Tag

A fully weatherproof, collar-mounted sensor with a battery life of up to seven years. The monitoring neck tag is mounted on an easy to adjust and totally secure collar, making it ideal for growing animals.



Monitoring Ear Tag

The monitoring ear tag is also fully weatherproof (IP68 rated) and extremely durable.

A bright flashing LED makes it easier and quicker for herd managers and their staff to spot which animal(s) the SenseHub system has highlighted as needing attention either for heat, health, or routine examination purposes.

The monitoring ear tag is covered by a four-year warranty and has an expected battery life of five years*.

Unique battery alerts optimize tag life

Battery alerts on the monitoring ear tag help you to preserve tag battery life and warn of battery failure. With the battery alerts you never miss an animal that needs attention.

Automated
LED usage
alert



Critical
battery
alert

* Overuse of the LED may reduce battery life. Recommendations for LED use are provided in the User Guide and eLearning tutorials.



SenseHub Controller

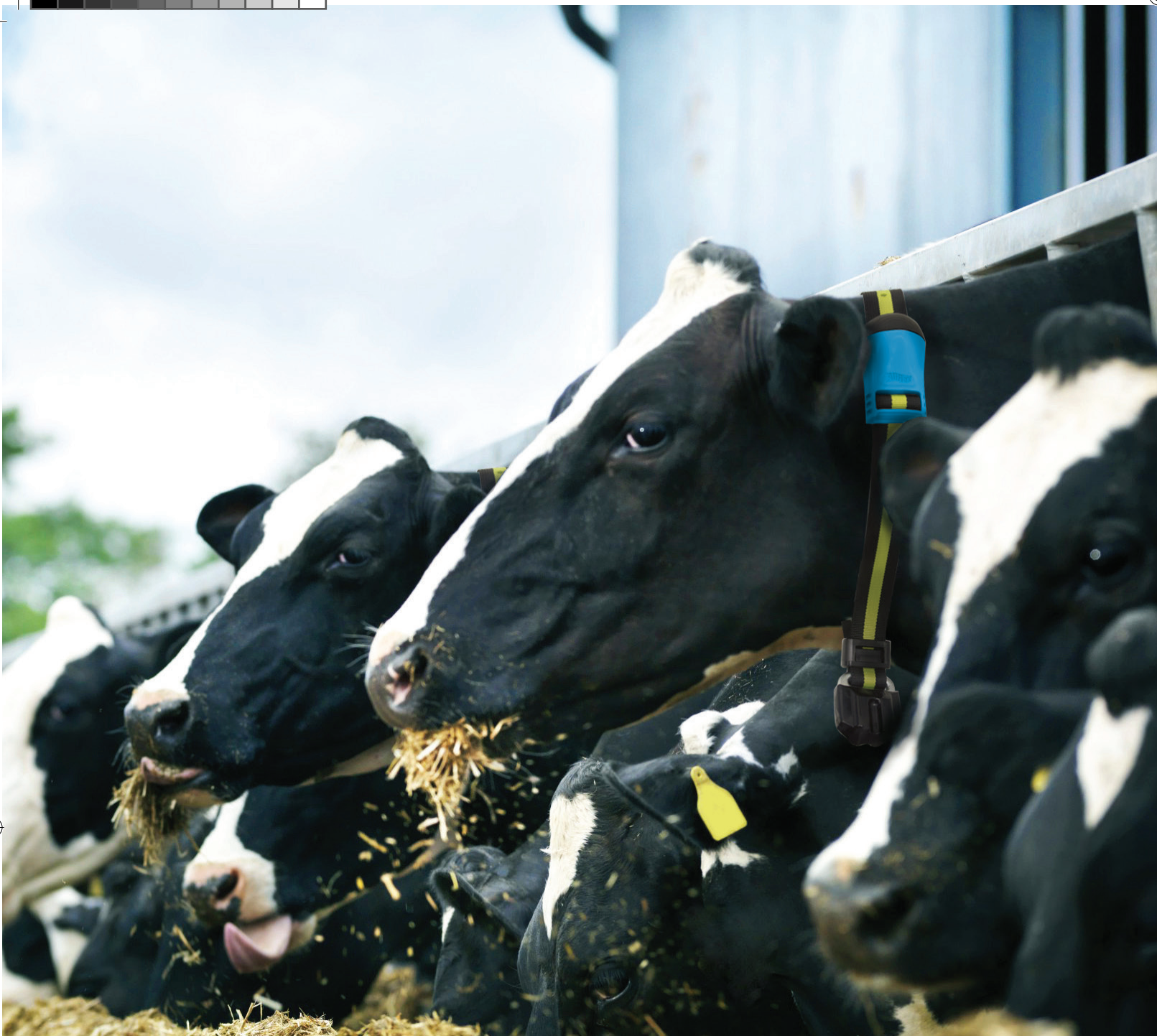
The SenseHub controller is the beating heart of the SenseHub system: continuously collecting data from your herd's monitoring tags, it processes this information before transmitting it via the internet and to the local network where it is presented in an easy-to-understand format for you to use. Additional antennas can be installed to extend the effective range and coverage of your system, with a solar-powered version also available for remote grazing locations.



SenseHub App

Simple to use and with easy-to-understand graphs and tables, the SenseHub app lets you use your smartphone, tablet or PC to stay in touch with your herd 24/7 and will automatically alert you to any heat events or potential health issues. The app is compatible with many third-party farm management software packages and can be accessed by multiple users on multiple farm units to log events such as inseminations and other events.





A connected solution that adapts to your farm

The SenseHub Dairy ecosystem is evolving to deliver even greater automation and insights with the addition of new hardware and extended system capabilities. Incorporating behavior monitoring, with milk monitoring and smart automation technologies into a modular ecosystem with the flexibility you need to effectively monitor your dairy animals across the production cycle.

Healthy herd

As well as monitoring your herd's fertility status, SenseHub also checks for any signs of behaviours related to ill health or stress. As soon as SenseHub detects something out of the ordinary (often before any physical symptoms have been exhibited) it sends a health alert to your phone so that you can take early preventative action.

- ✓ Reduce emergency veterinary intervention and lower treatment costs (enables a more proactive working relationship with your vet)
- ✓ Minimise milk loss
- ✓ Reduce mortality and non-voluntary culling rates
- ✓ Track the recovery of animals to assess the effectiveness of treatments
- ✓ Proactively manage cows through the fresh period for better post-calving performance

MONITOR Monitor animal status and track data

SenseHub Dairy enables you to identify and observe animals round the clock, in order to track behaviors and detect changes that may indicate a key event or possible health issue – from calf to cow.

UNDERSTAND Turn information into actionable insights

SenseHub Dairy system analyses the collected data to deliver actionable insights and status reports that are sent directly to you and your team – including alerts for animals requiring your attention.

ACT Leverage insights for operational gains

SenseHub Dairy's integrated ecosystem leverages individual or group insights to improve animal well-being and enhance workflow efficiency – while easily integrating with other solutions, such as herd management systems.

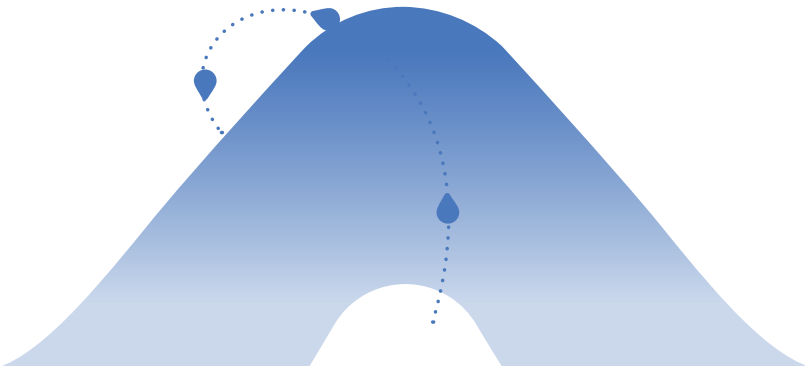


A flexible application plan for every farm

With six application plans to choose from, there's a SenseHub system for every size and type of dairy farming system. Choose from reproduction, health or group monitoring – or a combination of all three – to build a system which meets your specific requirements.

	Essential	Youngstock	Starter	Advanced	Premium	Lifetime
Youngstock Monitoring		●	●	●	●	●
Reproduction Monitoring			●	●	●	●
Health Monitoring		●		●	●	●
Group Monitoring					●	●
SenseHub In-Line Somatic Cell Count Sensor	●				●	●
SenseHub In-line MilkPlus Sensor	●				●	●
Sorting Gate Automation	●		●	●	●	●

- Integrated in the application plan
- Additional Hardware or Application Plan is required



Actionable information

SenseHub makes things simple by presenting your herd's data in a clear and easy to understand format that allows you to monitor the key aspects of your herd's performance. Data is collated based on subtle animal movements and behavioural patterns and then analysed through a set of sophisticated algorithms in order to provide you with actionable information.



Heat

Real-time, actionable insights eliminate guesswork and inconsistency, reduce skilled labor requirements and save valuable time. With heat detection accuracy and data that can be used to make precise insemination decisions, you can reduce calving intervals, improve animal productivity, and advance herd genetics.



Health

SenseHub Dairy's monitoring application can alert you to calves, heifers and cows that may need further attention due to the risk of developing potential health issues, often before clinical signs become visible or productivity drops. Including during high risk times such as post-calving, you can make informed decisions in consultation with your veterinarian to help avoid physical deterioration and reduce treatment costs.



Lifetime

The only integrated behavior monitoring solution for whole-life monitoring, SenseHub Dairy enables you to anticipate health issues with your calves, heifers, and cows – so you can establish optimal health and performance from the start of every cow's life. Giving you greater control throughout the complete animal lifecycle.



Nutrition

SenseHub collates eating pattern and rumination information from each group of animals to help you see how they react to dietary changes and to identify potential problems associated with housing and nutritional irregularities.



Heat Stress

SenseHub can even tell when your cows are feeling the heat: by monitoring how frequently and heavily they are breathing, SenseHub can show you if your groups are suffering from heat stress so that you can take action to minimise any negative effects.



Group

SenseHub Dairy's group monitoring applications help you understand health, comfort, nutrition, heat stress and other essential information. Group data informs the response to immediate issues and guides longer-term planning to improve herd-wide nutrition, well-being, and productivity.

Heat detection and fertility management

SenseHub enables herd managers to make informed breeding decisions by accurately identifying the various stages of heat events and filtering out any false heats. It also highlights the optimum time for insemination to take place, thereby improving first service conception and subsequent pregnancy rates.

- ✓ Accurately detects 90-95% of real heats including silent and weak heats
- ✓ Highlights the optimal timing for AI using conventional and/or sexed semen
- ✓ Reduces AI and semen costs
- ✓ Reduces the needs for visual observations
- ✓ Shorter calving interval and reduce the number of open days
- ✓ Early detection of anoestrus cows, suspected abortions and irregular heats
- ✓ Improved cow longevity
- ✓ Fast-track genetic progression by increasing conception rates from sexed semen

Expected calving and dry off report

The calving report/graph includes a dry-off estimation date for each cow to support you in controlling dry off routines and show your pregnancies produced over the breeding season allowing better herd management leading into transition.

Fertility summary report

Provides insight into your herd reproduction performance to support decisions.



Youngstock

Freedom is knowing that you're optimising performance at the start of every cow's life

The first and only Youngstock monitoring solution

SenseHub Dairy Youngstock is the first solution dedicated to monitoring dairy calves and heifers for the first 12 months of life – so you can establish optimal performance from the start of every cow's life.

SenseHub Dairy Youngstock provides actionable insights to give you a more comprehensive understanding of your animal's status and needs – allowing you to focus valuable time and resources on calves and heifers that may require special attention.

SenseHub Dairy Youngstock



* Weaning event age depends on farm management routine. ** Post-weaning animals in paddocks not included.

Whether you monitor from birth, with nipple-fed calves in single hutches, or post-weaning with calves in group pens, SenseHub Dairy Youngstock delivers actionable insights and alerts to help you optimise the well-being of your calves.

With 24/7 monitoring letting you know which calves need attention, as well as a blinking LED on the calf's monitoring ear tag for quick location, SenseHub Dairy Youngstock makes it easy for you to prioritize the care of your youngstock and adjust your workflow to improve operations on your farm – in three steps:

1. Attach monitoring ear tag at birth or at weaning
2. Monitor behavior in the SenseHub Dairy system
3. Easily identify calves and heifers requiring your attention



Milk monitoring

Measure where it matters

With the new fully integrated **SenseHub Dairy In-Line MilkPlus Sensor** and the **SenseHub Dairy In-Line Somatic Cell Count Sensor**, the SenseHub Dairy milk monitoring solution provides you with milk yield and quality insights.

When combined with SenseHub Dairy behavior monitoring and automation, you can improve workflow so you can Farm with **more freedom**.



Actionable insights into milk quality and yield

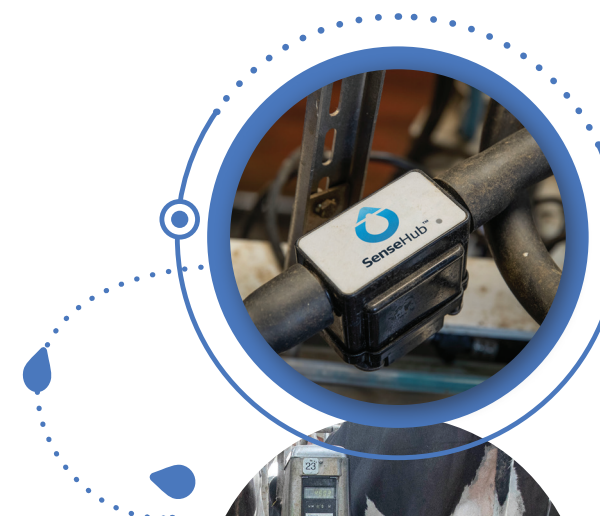
No matter which milking parlor type or brand, with the SenseHub Dairy In-Line MilkPlus Sensor, you can easily monitor critical milk data such as yield, fat, protein, lactose, blood, and conductivity – providing you with instant visibility into milk trends for individual cows and your entire herd.

Individual SCC results in under two minutes

With the SenseHub Dairy In-Line Somatic Cell Count (SCC) Sensor, you get fast visibility of SCC within two minutes of cupping your cows – without disrupting the milking routine, and with all results stored and displayed in the SenseHub Dairy system.

Create custom insights to fine-tune daily operations

With **SenseHub Dairy milk reports and graphs**, you have shift, daily and lactation milk production insights to make more informed, breeding and udder-health decisions to optimise productivity and animal well-being.



Animal ID	Group	Status	Location	Udderage	Yield (kg)	Fat	Protein	Lactose	SCC	Blood	Conductivity
1941	Milking	Ready	6	110	15.80	3.88%	3.23%	4.67%	21	0	5.0
1948	Milking	Ready	6	120	12.30	2.88%	3.64%	4.68%	7	0	5.4
1949	Milking	Bred	6	126	16.08	4.88%	3.48%	4.71%	17	0	5.4
1952	Milking	Bred	6	121	16.75	2.49%	4.34%	4.50%	27	0	5.1
1951	Milking	Bred	6	125	15.21	4.88%	3.11%	4.88%	738	0	5.4
1952	Milking	Bred	6	130	17.33	3.88%	3.64%	4.68%	33	0	5.0
1953	Milking	Bred	6	117	16.51	3.78%	3.53%	4.68%	28	0	5.3
1958	Milking	Bred	6	134	16.26	4.8%	3.62%	4.73%	6	0	5.3
1959	Milking	Bred	6	87	21.35	3.33%	3.83%	4.33%	30	0	5

Also available as an EID-based solution

In addition to SenseHub Dairy monitoring ear and neck tags, SenseHub Dairy Essential, delivers an EID-based solution to farmers who want milk monitoring insights and the automation of SenseHub sorting gates.





Report Generator

Report Generator is a customisation tool for SenseHub that gives you the focus and control you need to manage livestock with more freedom. Intuitive new functionality lets you create your own custom SenseHub reports according to your specific production goals, and display actionable insights in real-time.

Report Editor

Transition Report | Animals

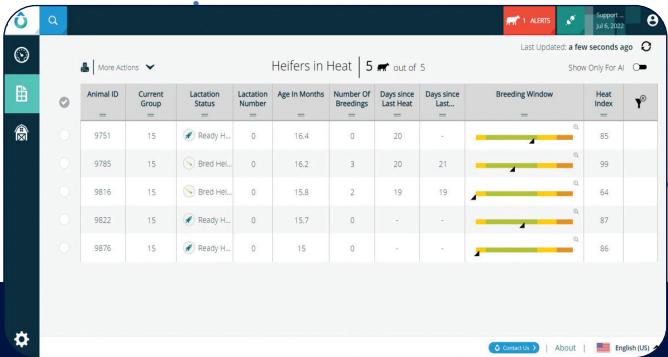
Conditions

Report Preview | 270 Animals

Animal ID	Current Group	Lactation Number	Lactation Status	DM/Age	Days Pregnant	Open Days
111	Default	1	Ready	87	-	-
222	Default	1	Pregnant	389	248	141
333	Default	1	Pregnant	541	247	94
1060	Milking	10	Bred	189	-	-
1070	Milking	10	Bred	165	-	-
1154	Milking	8	Bred	182	-	-

The cloud based feature allows users to customize their monitoring reports to meet specific needs.

- ✓ Creation of new reports, such as dry-off reports, pre-calving reports, or customisable reports
- ✓ Editing existing system reports to fine-tune to your farm needs
- ✓ Intuitive and user-friendly
- ✓ Access to new data, not available before in SenseHub
- ✓ Web and Mobile



Report Generator gives you the insights you need to farm with more freedom



Understand animals and farm operations with more precision



Target resources with more speed and certainty



Fine tune daily tasks to achieve specific production goals



Get relevant insights when and where they are needed



Custom reports give you insights to improve farm management



Routine management

With SenseHub watching your cows and heifers 24/7 you'll be able to use solid data to make better herd management decisions. This takes the guesswork out of your day-to-day routines and makes it easier, quicker and less stressful to ensure your whole herd or groups of cows remain on track.

- ✓ Understand the impact of changes to diet, housing or weather conditions on your herds milk yield, health and fertility performance
- ✓ Easy record keeping enables you to log key events and share data with third party systems



Simple to install, easy to use

We will carry out a full site survey to ensure our system is suitable for your farm. We'll consider where your cows are housed, where they're fed and where they graze and recommend a setup accordingly.

We manage the installation of your new system and provide a comprehensive on-boarding programme to ensure you get the most out of the system from day one.

We also provide a structured programme of ongoing training and support via our online SenseHub Academy which contains a wealth of useful training tools and user manuals, and we'll constantly be working in the background to keep your system fully up-to-date and future-proofed via regular software updates.



The key benefits

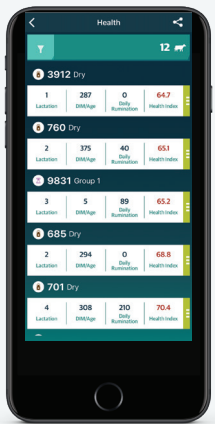
SenseHub monitors five key areas to help you increase your dairy herd's productivity, improve livestock health and well-being and enhance your farm's profitability:

Heat detection



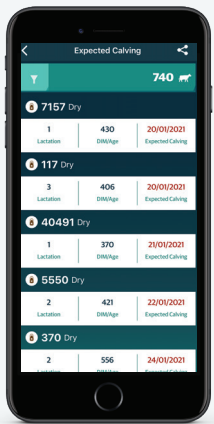
Accurate identification of the peak time for insemination optimises conception rates, tightens the calving period and accelerates the genetic progression of your herd.

Health monitoring



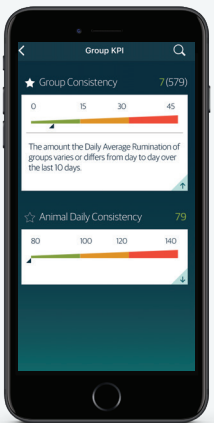
Early detection of health problems for quicker intervention, reduced drug use, faster recovery, treatment follow up and reduced involuntary culling.

Pre/Post Calving distress alerts



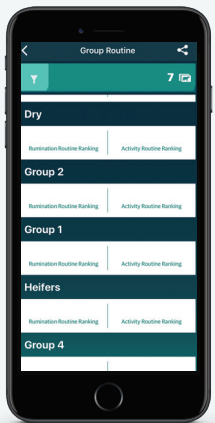
Reporting of potential difficult calvings and possible post-partum health problems to safeguard the animal's future performance.

Group KPIs



Provides an accurate overview of the effectiveness of the ration or feed changes for each group of animals.

Routine management



Reduces the impact of planned or unforeseen changes on productivity by monitoring for any sudden changes in activity or behaviour.



*Report generator is only available in the Premium and Lifetime application plans.



Access all the benefits when you subscribe

- ✓ Supports multiple populations on the farm - cows, heifers and youngstock
- ✓ Supports all available application plans - Starter, Advanced, Premium, Lifetime and Youngstock
- ✓ Allows mixed application plans on the same farm
- ✓ Allows mixed tags on the same farm - monitoring ear tags and monitoring neck tags
- ✓ Includes prioritised service and support
- ✓ Continuous warranty on all hardware and tags for the duration of the subscription
- ✓ Subscriptions are available as multi-year contracts, with exit points according to the agreement, and automatic silent renewal every subsequent year.

Continuous software updates with enhanced features

You'll get access to advanced on-site and remote training resources

Affordable

Get access to the full capabilities of the monitoring solution with no upfront costs, just a convenient, affordable monthly payment.

Simple

The **GO** subscription is calculated as a monthly fee per tag according to the application plan level. It is easy to order, and the billing statement is simple and easy to understand.

Flexible

Provides support for mixed populations, tags and application plans on the farm, and can be upgraded as needs change.

Peace of mind

A no-risk option, giving you access to new features, continuous service and no unexpected costs.

SenseHub® GO

One easy-to-understand, monthly bill for all your monitoring needs.

SenseHub GO is a simple and affordable subscription plan for the SenseHub and Dataflow II cattle monitoring solutions.

As a subscriber you'll have access to these application plans with zero upfront cost and full flexibility to change or add to your solution as your needs evolve.

Equipment, installation and applications are all included in the monthly fee.

