



## Keep an eye on every animal

Scale increase and a drive towards efficiency are the prevalent trends in the dairy farming industry. This makes it a constant challenge to keep account of individual animals. How can you keep an eye on them 24 hours a day? How can you keep them healthy with good fertility results? Ovalert detects and identifies health and fertility signals earlier and more effectively than the human eye. It functions as your sixth sense to make your herd more efficient and easier to manage.



### **OVALERT IN A NUTSHELL**

Hundreds of farmers are discovering the added value of Ovalert health and fertility management. Ovalert does much more than simply measure activity. In a nutshell:

# 24/7 registration of activity (neck or leg sensor) Heat detection Health monitoring Link to SireMatch Cow locating Herd performance trends Easy to use

# Ovalert automates the detection of health problems and manages the fertility cycle

- Ovalert's high-tech sensors detect cow behaviour (eating, rumination, standing, lying, heat behaviour)
- Ovalert converts these signals into management information such as:
  - Heat alerts
  - Advice on optimal moment of insemination
  - Alerts to abnormal cow behaviour (health risks)
  - Individual cow analysis
  - Group and herd analysis
- Valuable management information can be viewed through multiple devices





### Fewer health issues

- Health signals will be detected (especially important in the transition period)
- ▶ Lower risk of sick cows and heifers
- ▶ Lower health costs and lower culling
- ▶ Higher average herd age
- ► Extra milk/cow, higher efficiency

### **Better fertility results**

- Optimal detection of heat
- ▶ Insemination at the right moment
- ▶ Higher conception rate
- Lower fertility costs and optimal calving interval
- ► Extra milk/cow, higher efficiency







An animal with <u>normal behaviour</u> each day shows:

12-14 hours lying time, 11 lying periods, 2,500-3,000 steps, 4-6 hours eating, 9-14 meals, 7-10 hours of rumination per day



BIRTH 0-9 MONTHS HEIFER 9-15 MONTHS

FIRST PREGNANCY

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### **HEIFER**

- ▶ Health attentions 2 days before any clinical signs
- Finding non-cyclers and irregular cyclers
- Prevent excessive fat reserves by inseminating on time, decreasing the risk of fat cow syndrome
- Lower calving age of heifers and save \$4,- per day



# DRY-OFF & DRY PERIOD FAR OFF / CLOSE UP

- ► Herd Performance Trends: group eating, rumination and inactive behavior patterns
- ▶ Health monitoring: intensive objective monitoring of cows in the entire undervalued period
- Earned 500kg of milk per cow for next lactation by correct/smooth guidance towards the coming lactation

DRY-OFF & DRY PERIOD FAR OFF / CLOSE UD



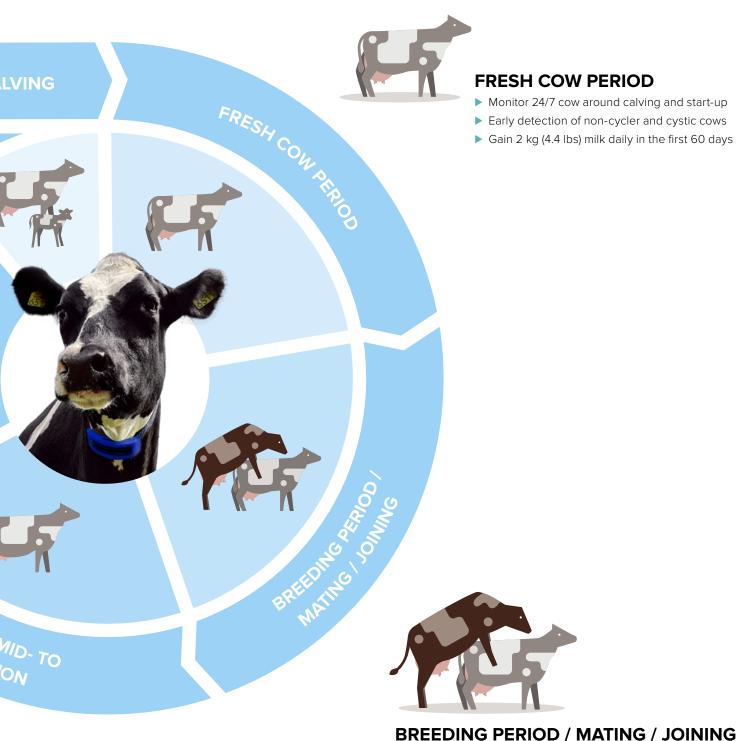


### **PREGNANT / MID- TO LATE LACTATION**

- ▶ Reproduction information before and after pregnancy checks
- ▶ Warning if pregnant-tested cows return in heat
- ► Herd performance indicator
- ➤ The systems pays for itself if one cow is saved out of 100 cows due to health monitoring







- ▶ Proven > 90% heat detection rate
- ► Saves valuable time
- ► Get cows pregnant when desired
- ▶ Timely insemination to prevent excessive fat reserves, decreasing the risk of fat cow syndrome
- ▶ 6 week-in-calf rate increase of 35%
- ▶ Undesired open cow costs \$2,- per day



### **HEAT DETECTION**

Highly accurate heat detection with advice for the optimal insemination moment, as well as reproduction insights.

### **HERD PERFORMANCE TRENDS**

Chart the behavior patterns of your groups and entire herd. Get group alerts when possible risks affect a group's performance. Evaluate the impact of management decisions on herd performance to make improvements.





Put the power of precision farming on your side. Improve your bottom line with the solutions to maximize dairy herd performance and save time, labor and costs.



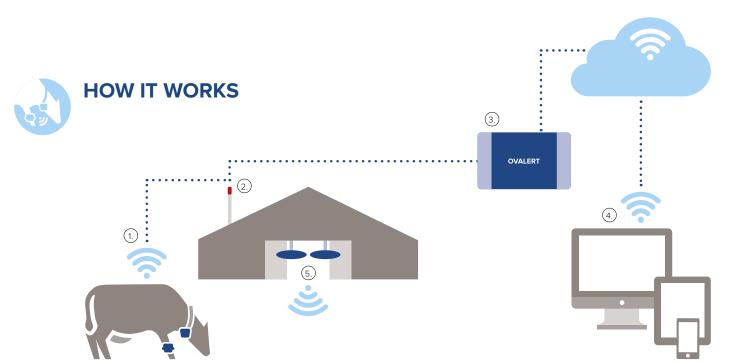
### **HEALTH MONITORING**

Individual health management for early detection of health issues and intensive monitoring of transition cows and post-treatment recovery.

### **COW LOCATING**

Locate cows needing attention or treatment quickly and easily. See and follow their real-time position on your barn map.





- 1. The Smarttag registers the movement and behaviour of the individual animal. Data collected in the last 24 hours is stored in the Smarttag.
- 2.) When the animals are within the range of the antenna, all data from the Smarttag is collected.
- 3. The collected data will be transmitted to the heart of de system: the process controller which continually analyses the data.
- 4. The analysis results can be viewed on your smartphone, tablet or PC. The system immediately provides an alert relating to heat detection, abnormalities in the eating or rumination pattern and abnormalities in standing-lying behaviour or inactivity.
- (5.) Beacons in the barn send signals to all tags regarding their current location in the barn.





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### **HARDWARE**

### Smarttag Leg with standing and lying monitoring



The Smarttag Leg measures the cow's behaviour, such as:

- ▶ The time a cow spends lying per day
- ▶ The number of times a cow stands up per day
- ▶ The number of steps a cow takes per day

The Smarttag Leg records the behaviour of an animal regarding to lying, standing and walking. Besides heat detection, changes in the patterns can also be an indication for health problems during transition, or for lameness.

### **Smarttag Neck with eating monitoring**

The Smarttag Neck measures the cow's eating behaviour, such as:

- ▶ Eating time
- ▶ Eating moment
- Hours of not eating



The Smarttag Neck records the time an animal takes in roughage or grazes each day. Changes in this eating behaviour indicate there may be something wrong with the animal and that it needs further attention. Besides heat detection, the neck tag also enables you to keep an extra close eye on your animals during the vulnerable period around calving, when they are more susceptible to diseases due to changes in their environment, feed, energy balance and stress.

### Smarttag All in One with rumination and health monitoring



The Smarttag All in One monitors:

- Rumination
- ► Eating time
- ▶ Eating moment
- ► Hours of not eating
- Inactivity

This all in one neck tag is the most complete tag available for monitoring the health and fertility of your herd. It functions in a similar way to the Smarttag Neck, but also includes rumination observation.

### Beacons for cow positioning

The cow positioning system registers the position of individual animals using the Smarttag All in One. The tag receives signals from beacons hanging in the barn. The tag then transmits signals to the central antenna. Using this data, the computer calculates the position of each cow with an accuracy of one metre. You can easily see the position of each specific animal on your smartphone, tablet or PC. The cow positioning system saves time and can be a good alternative for separation.





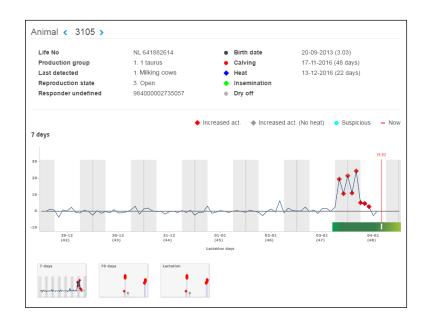
### PERFORMANCE INTERFACE

The Ovalert performance interface provides a quick and clear overview of both your entire herd and the individual animals. Which animals need attention? Which animals need to be inseminated today? The alerts show abnormalities in the behaviour of your cows. Through a clear interface, you will receive all alerts generated by the Smarttags. The alerts can also be viewed on your smartphone, tablet or computer.

### **Heat detection**

These screens show which cows are in heat and need to be inseminated. The white indicator shows which stage of heat the cow is in.

| Heat detection - Attentions |                  |              |             |               |            |                  |   |            |     |          |
|-----------------------------|------------------|--------------|-------------|---------------|------------|------------------|---|------------|-----|----------|
| Actions   V                 |                  |              |             |               |            |                  |   |            |     | <b>a</b> |
| ☐ Animal ♦                  | Production group | Lact. days 🌲 | Heat days 🌲 | Insem. days 🌲 | Pregnant + | Attention time - | Optimal insemination moment $\Rightarrow$ |            | Add | l event  |
| 1073                        | 1. Milking cows  | 210          | 178         | 30            |            | 00:59 (11 hours) |   | 111        | н   | 1        |
| 1292                        | 1. Milking cows  | 338          | 298         | 278           |            | 20:59 (15 hours) |   | aid        | Н   | 1        |
| 1370                        | 1. Milking cows  | 123          |             | 22            |            | 10:59 (25 hours) | 1   | ald        | Н   | 1        |
| 1069                        | 1. Milking cows  | 235          |             | 183           |            | 08:59 (27 hours) |   | <u>ldd</u> | Н   | 1        |
| 1287                        | 1. Milking cows  | 16           |             |               |            | 02:59 (33 hours) | 1   | <u>lad</u> | н   | I        |



### **SireMatch**

**SIREMATCH®** 

Ovalert provides SireMatch mating advice for each animal in heat. This is possible by integrating SireMatch mating advice and Ovalert. Thanks to this combination your health, fertility and breeding management

becomes one, automated process. SireMatch is a mating program that supports professional producers in their breeding choices and makes them more successful.





### Animals to check today

This overview shows which animals need to be checked because of abnormalities in their behaviour patterns. The animal in this example shows a drop in eating and rumination time and an increased inactivity. This can be an indication for a health problem, like lameness, mastitis or a nutritional disorder.



### **Group management**

This overview shows the behaviour of the entire herd or specific groups of animals over time. Unexpected

changes in eating time, rumination time or inactive behaviour of the group are easily spotted.



