CLIMATE MONITOR



THE BEST INTEGRATED FARM SENSOR SYSTEM IN THE WORLD

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TOMORROW'S RESEARCH TECHNOLOGY



Healthy animals are a prerequisite for a healthy farm. With real time insight into the farm, extensive measurements, smart software and personal training, you can provide even better advice on animal behaviour and farm climate.

The Healthy Climate Monitor (HCM) combines measurements from multiple sensors with images. This has led to successful diagnoses and preventive measures in the field of animal health. With the Healthy Climate Monitor, we support you as a veterinarian, feed advisor and researcher, allowing you to help your customers to perform better.

IMPROVE YOUR SERVICES AS A FARM ADVISC

DEVELOP EFFECTIVE CLIMATE STRATEGIES AND HELP YOUR CUSTOMERS TO PERFORM BETTER

At Healthy Climate Solutions, we are committed to a healthy climate in farms and a sustainable future for humans and animals. We do this together with you as farm advisor or researcher. When you rent or buy a product from us, we support you in its use through personal contact and with our various training courses that we provide on location. Our experienced veterinarian will be happy to help you on your way.

Find smart solutions

to complex problems:

- Recurring health problems where the livestock farmer needs new insights.
- The future for livestock farmers is uncertain: give livestock farmers future prospects and attract new livestock farmers.
- Motivating employees in your company, by inspiring them with our innovative technology.



Solutions that the Healthy Climate Monitor can provide:

- Quickly identify animal health problems and come up with new solutions together with the livestock farmer in a data-driven way.
- With reliable measurements and advice for a healthy farm climate, you are ready for a sustainable future.
- Real time monitoring provides new insights and inspiration every day. This ensures quick feedback on your work and more job satitsfaction every day for farmers and advisors.

NUMBERS TELL THE TALE

SENSORS

The Healthy Climate Monitor includes sensors to measure ammonia, CO2, temperature, relative humidity and light. The HCM is equipped with 6 sensors and a HD camera. With the camera it is possible to analyse animal behaviour in addition to climate analyses. It's like having an extra pair of eyes and nose in the farm 24/7.

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Photos

The HD camera takes pictures day and night that show you the animals' behaviour. By comparing the photos with other data, you create qualitative analyses for your livestock farmers or for your research.

Fine dust sensor

Fine dust can be harmful for the lungs, including in animals. It impairs the cleaning function of cilia in the airways. Prevent health problems by signalling fine dust peaks and the times when these occur.

CO, sensor

With our precise CO₂ sensor (or additional DOL119/139), you get a good indication of the air ventilation. This helps livestock farmers to improve health for humans and animals in their farms.

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Thermal imaging

Every second, the thermal image is analysed for moving animals. Fantastic high-resolution (FLIR) images in the farm help you to continuously analyse movement, sick animals and the environment.

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Heat stress

●●● Up to 3 external DOL53/51 NH₃ ●●● sensors (optional)

Healthy Climate

Get direct insight into heat stress through automatic calculation based on relative humidity and temperature. Create the ideal thermocomfort zone through real time insight into measurements and heat stress treshold values per animal species.

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Sound spectrum

Sound is continuously analysed and plotted into a total volume graph and spectrogram. This allows for clear interpretation of loud sound peaks in the spectrum. Specific animal sounds can also be recognised over time.



Motion

Continuous movement analysis is performed on the thermal images. This allows us to visualise movement of the animals, so you can signal health problems and abnormalities such as restlessness and lethargy in pigs.

<u>-ò</u>;-Light

sensor.

Animals like regularity. The brightness of visible light is measured continuously, allowing you to see the exact day-night rhythm the animals experience. If you also want to measure lux, pair an external DOL16

Temperature

The ideal temperature is different for everyone. Also for animals. Keep your animals healthy by timing major fluctuations and temperatures outside the limit values for each animal species in time.

$\langle \ \rangle$ Air pressure

Compare indoor air pressure with outdoor air pressure to see if the ventilation system in the farm is working as expected and advise the livestock farmer.

Particulate matter sensor

IR night vision

DOL53 NH₃

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Sound (optional)

Air pressure

CO₂ sensor

Light sensor

FLIR thermal camera (optional)

HD camera

Network connection options





Ammonia

Ammonia (NH₃) is harmful to everyone's health in high concentrations. By measuring 24/7 with the world's most widely used (DOL53 and DOL51) ammonia sensors, you can capture all emissions, reduce them and greatly improve your farm climate.

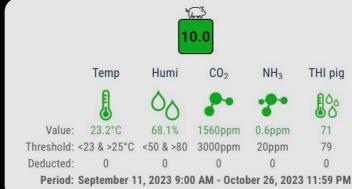
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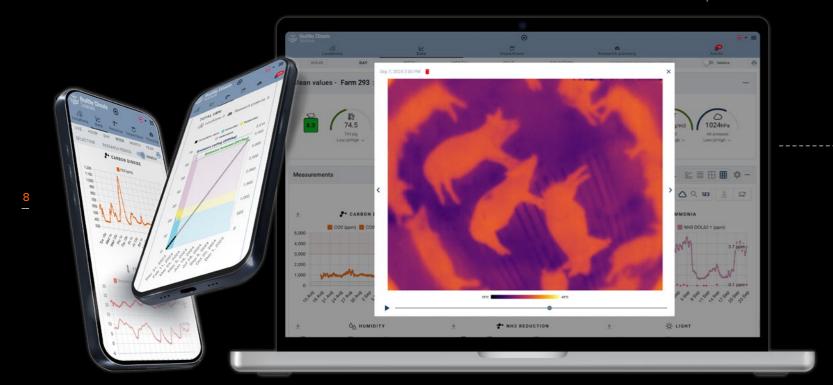
Relative humidity

The RH plays a role in the survival of some viruses and bacteria. Improve animal health by ensuring that humidity levels remain within limits.

LIVE DATA APP AND DASHBOARD

BY WATCHING THE FARM IN REAL TIME, YOU CAN SEE THE NATURAL REACTION OF ANIMALS TO THEIR ENVIRONMENT

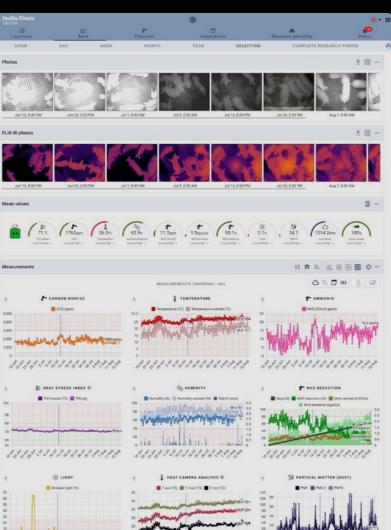


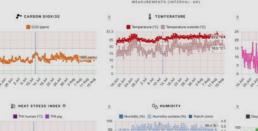


The Healthy Climate Monitor app gives you direct access to the measurements via your phone. tablet or computer. So wherever you are, you get immediate insight into the data and you can make quick analyses.

The measurement data are clearly presented in graphs, including the limit values per animal species, so that the values are given context and therefore are easy to interpret.

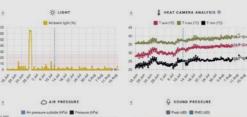
Sharing data with the lifestock farmer or your colleagues can easily be done within a survey, measurement site or measurement system. You can also export data to Excel, or create a weekly PDF report directly from the app.



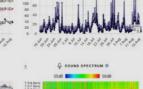


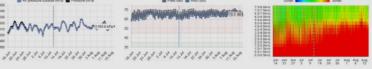






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THI pig



Healthy Climate Index

To visualise the health of the climate for your animals as objectively as possible, we have created a convenient total score: the Healthy Climate Index. This shows you at a glance whether the climate remains within all limit values for your animals.

Health score

Within the app, you can easily add manually scored data to the automatic measurements. You can fully customise your checklist by scoring only on specific items that occur in specific farms, or with certain animal species. You can also easily make notes and mark certain moments in time.

Research module

The research module is especially designed for researchers. Benchmarking, filtering emission data by farm floor type and running Al models. These are just a few of the many options available in our app with this additional module.



Join our network of professionals

Several veterinarians, farm advisors and researchers preceded you in using the Healthy Climate Monitor. They have had good experiences with our product, including in terms of ease of use and service. They have also achieved positive results by giving targeted animal health advice and preventive measures.

Healthy Climate Monitor users give us an average of 9 for installation, ease of use, service and guidance.

Request a quote from us today and contribute to a healthier future for all of us.

- The HCM has been on the RFO Environmental List since 2022, making tax rebates available on the purchase of a complete system as well as on the production costs.
- The Healthy Climate Monitor can be purchased with various sensors and camera configurations.
- We make your HCM in your company's colours.

ORDER TOMORROW'S RESEARCH TECHNOLOGY TODAY

Would you like to test the Healthy Climate Monitor for a period first? The HCM is also available for rent including remote guidance by our veterinarian. Ask about the possibilities.

Experience the added value of the Healthy Climate Monitor for yourself. Scan and start with a trial.





"Tail biting is gone by the insights and advice from Healthy Climate Solutions. Within 4 weeks already a clear effect."

- Veterinarian

"We are satisfied with the insight/ result achieved! Normally a measurement is always a snapshot, often during the day and this device measures every minute and you can track it live and follow the effects of changing climate settings directly."

- Livestock farmer

"Super! All our advisers can watch directly through the camera, I would like to hang more of them."

- Farm manager

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