



THE HEALTHY CLIMATE MONITOR

THE BEST INTEGRATED
FARM SENSOR SYSTEM
IN THE WORLD



FARM CLIMATE & ANIMAL BEHAVIOUR 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.

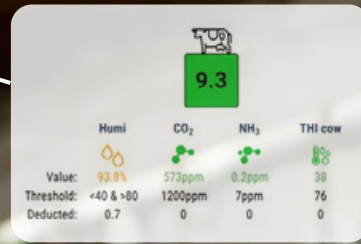
The Healthy Climate Monitor (HCM) combines measurements from multiple sensors with images. This has led to successful diagnoses and preventive measures in the field of animal health. With the Healthy Climate Monitor, we support you as a veterinarian, feed advisor and researcher, allowing you to help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



Emissions Measurement ♦ Drug + Alcohol ♦ Environmental Monitoring ♦ Post Harvest Technology

PACIFIC DATA SYSTEMS AUSTRALIA

IMPROVE YOUR SERVICES AS A FARM ADVISOR



DEVELOP EFFECTIVE CLIMATE STRATEGIES AND HELP YOUR CUSTOMERS TO PERFORM BETTER

At Healthy Climate Solutions, we are dedicated to fostering a healthy farming environment and ensuring a sustainable future for both humans and animals. We work hand-in-hand with you, whether you're a farm advisor or a researcher. When you rent or purchase one of our products, we back you up with personalized support and a variety of on-site training courses. Our experienced veterinarian is always ready to assist you every step of the way.

Discover smart solutions to complex challenges:

Address recurring health issues: Provide livestock farmers with fresh insights to tackle ongoing health problems.

Secure the future of livestock farming: Offer new prospects to ensure stability and attract the next generation of farmers.

Inspire your workforce: Motivate your employees by energizing them with our innovative technology.

Solutions provided by the Healthy Climate Monitor:

Swift issue identification: Quickly detect animal health issues and collaborate with livestock farmers to develop data-driven solutions.

Reliable guidance: Benefit from accurate measurements and expert advice on maintaining a healthy farm climate.

Real-time insights: Enjoy daily, real-time monitoring that offers fresh insights and immediate feedback, boosting job satisfaction for you and your farmers.



NUMBERS TELL THE TALE

SENSORS

The Healthy Climate Monitor includes sensors to measure ammonia, CO 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.

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.

CO With our precise CO 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.

Particle matter Particle matter can be harmful for the lungs, including in animals. It impairs the cleaning function of cilia in the airways. Prevent health problems by signalling particle matter peaks and the moments when these occur.

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.

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

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.



Light Animals like regularity. The brightness of visible light is measured continuously, allowing you to see the exact day-night rhythm the animals experience. You can measure lux, by pairing one or more additional external DOL16 sensors.

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.

Heat stress 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 threshold values per animal species.

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.

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.



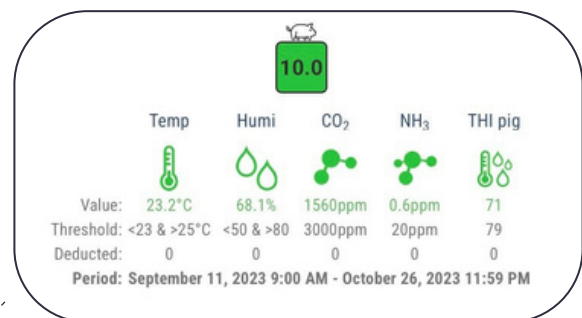
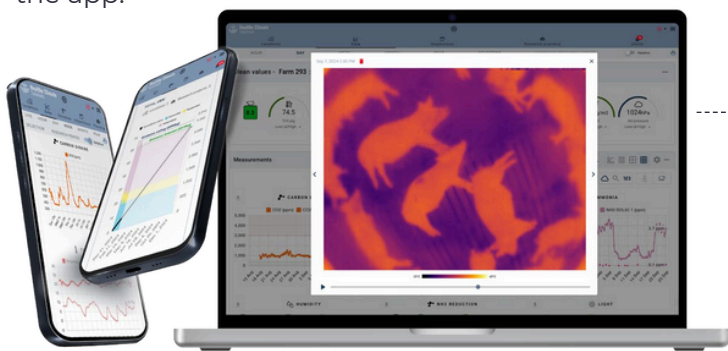
LIVE DATA APP AND DASHBOARD

BY WATCHING THE FARM INREAL 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 per country, so that the values are given context and therefore are easy to interpret.

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



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 make notes and annotate certain moments in time.

Research module The research module is especially designed for researchers. Benchmarking multiple researches, deep-filtering location data by farm, or floor type, or even creating weekmaps and bloxplot charts. These are just a few of the many options available in our app with this additional module.