



μMETOS ZT - Portable and mobile instruments for climatic measurement of livestock housing

The climatic condition of livestock housing significantly influences the genetic potential of farm animals. For example, high relative humidity, poor airflow, or excessive temperatures all negatively influence the health and well-being of pigs, cows and chickens. High temperatures in buildings or on the feedlot increase animal stress and reduce their potential.

These new instruments are designed to continuously record of all the relevant data in a building, pen or feedlot and will help the farmer stay in touch with his animals 24/7. User defined automatic alerts will be sent in real time if the heating or cooling systems happens to fail.

MEASUREMENT OF:

- Temperature inside and out
- Relative humidity inside and out
- Heat stress and noise
- Infrared main body building temperature
- CO₂ Levels

FEATURES:

- Wireless and portable for mobile use
- Fully web-based interface
- Fully battery powered, fast mounting without hassle
- Display of all data on the free mobile app
- Continuous measurement and storage of climate data
- Daily statistics of all data
- Simple and fast disinfection procedure enables rapid redeployment
- Comprehensive software with interface to multiple management programs



OPTIMISE HOUSING CONDITIONS AND SECURE QUALITY BY:

- Reducing the spread of disease
- Minimising the use of medicine
- Promote effective use of fodder
- Limit environmental pressures
- Optimise the use of energy

µMETOS ZT - the portable datalogger for climate data in the building and on the feedlot



FAST ROI THROUGH:

- Identify climate related problem zones in your building through permanent or temporary measurement of important parameters
- Double check your building climate computer system
- Immediate warning of malfunction of the climate control system
- Early warning of climate related disease risks or high stress events in the building or on the feedlot

MAIN FEATURES:

Easy mounting on various vehicles with immediate display of data – All operations are carried out easily and simply through wireless connectivity. (NB-IOT or LoRaWAN®). µMETOS ZT informs the user close to real time on the mobile phone and gives instantaneous warnings via SMS if an alert is triggered.

Free APP - µMETOS ZT comes with a comprehensive and easy to operate APP for your iPhone or your Android phone, which displays all kinds of useful tables as well as graphs. With one software license an unlimited number of stations can be managed.

Simple and fast disinfection of the device – µMETOS ZT is manufactured to enable a fast and secure disinfection of the main unit and the sensors.. This feature allows the user to move the unit from one building to another without a long quarantine (delay).

Exact and robust sensors

Temperature and relative humidity - The convection cap allows natural ventilation and gives protection to dust or other environmental factors. The temperature and relative humidity sensors have a special Teflon filter cap over the monitoring element and is mounted inside the protection cap.

Infrared main body building temperature - The main building temperature sensor uses wireless IR (infrared) sensor to take a measurement. Closely monitoring these values often highlights reasons why animals tend to pollute the building. In enclosed housing too low a temperature can promote clinical diseases, especially in pig pens where the critical (not damaging) temperature should not be below 18°C.

Noise and restlessness of animals: Noise creates stress – stressed animals make noise. Pigs and chickens physically react to stress with restlessness and noise. These two parameters are monitored with an infrared motion sensor whilst noise is measured with a microphone in a wide frequency spectrum (20Hz to 20kHz). Thresholds can be selected by the user and therefore all-important information is available with a time stamp (i.e. noise during feeding hours is normal and therefore not relevant).

Global radiation and black body temperature: These two parameters are especially important measurements for outside feedlots. The global radiation is measured on top of the convection cap of the relative humidity/temperature sensor. The black body temperature is equipped with a longer cable and can be mounted according to client's need or application.

