

# METOS®

## zt

Visit our homepage: [www.metos.at](http://www.metos.at)

### Portable and mobile instrument for continuous stable climate measurement

The stable climate has a decisive influence as you can utilize the genetic potential of your mast or breeding animals. High relative humidity, high ammonia values in the air or a cold main body of the building influence negatively the health of pigs and chickens in stables. High temperatures in stables or on the feedlot will decrease the efficiency of milk or mast cattle. µMetos zt is a new instrument for continuous recording of all relevant data in a stable or on the feedlot.



#### Measuring of:

- Temperature
- Relative Humidity
- Restlessness
- Noise
- Brightness
- Infrared main body building temperature
- Ammonia content of the air
- Black body temperature
- Global radiation
- Wind
- Rainfall

#### Features are:

- Portable for mobile use
- Battery powered, fast mounting without hassle
- Direct display of all data and storage up to 1 year
- Continuous measurement of climate data
- Daily statistics of all data
- Simple and fast disinfection
- Wireless interface to PC or Handheld with comprehensive software

#### Optimise holding conditions and secure quality to reduce:

- Rate of diseased animals
- Use of medicine
- Effective use of fodder
- Environmental Pressure
- Effective use of energy

Pesst Instruments GmbH. - more than 15 years success in working as one of the leading companies in agriculture monitoring systems. For more information and other models please visit our webpage.

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Turning Information into Profits

**Pesst**  
Instruments

µMETOS® zt the modern datalogger for climate data in the stable and on the feedlot  
 Find out about climate related problem zones in your stable – Double check your stable climate computer system – Early warning of climate related disease risks or high stress events in the stable or on the feedlot



### Exact and robust sensors

Temperature and relative humidity – The convection cap allows natural ventilation and gives protection to dust or other problem factors. The sensors for temperature and relative humidity have a special teflon filter cap over the sensor element and are mounted inside the convection cap.



### Infrared main body building temperature

The main body building temperature is measured accurately by a wireless IR (infrared) temperature sensor. Special interest for these values are to find reasons why animals tend to pollute the stable. In the farm holding of animals a too low main building body temperature can promote clinical diseases. Especially in pig holdings the critical (not damaging) temperatures should not be below 18°C.



### Ammonia in the air

Ammonia will come predominantly from faeces excreta of the animals which is lighter than air and comes from the slurry channels and rises to the boxes of the animals. Toxic level of ammonia will create lung disease only with concentrations over 50 ppm but concentrations of higher than 10 ppm will systematically boost existing infections. The sensor used for ammonia is the VAISALA AMT100 which delivers very accurate data in the important operating range of 0-100 ppm.



Noise and restlessness of animals: Noise creates stress – stressed animals are making noise. Pigs and chickens are reacting with stress and disturbances (restlessness and noise) to factors such as too little or too much feed. These two parameters are monitored with infrared motion sensor and noise is measured in a wide frequency spectrum (20Hz to 20kHz) which evaluated by the software. Thresholds are selected by the user and therefor all important information is available in a time sequence (i.e. noise during feeding hours is normal for some time and not relevant) over 24 hours and stored for many weeks for information and later analysis.



Global radiation and black body temperature: These two parameters are especially interesting for outside measurements on 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 mounted according to the need of the client or the application.



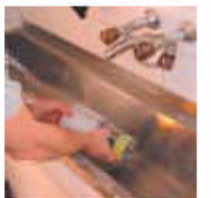
Easy mounting with immediate display of data – All operations are carried out easily and simple by a rotary switch and two push buttons. µMETOS® zt informs the user through a two line display on all actual or instantaneous as well as all stored values. µMETOS® zt measures every 5 minutes and stores the values for at least one full year.



Wireless data transfer to the PC – µMETOS® zt has a built-in infrared interface and communicates wireless to the Handheld or PC. Recorded data can be downloaded to any commercial Handheld's (Pocket PC Series) without dismantling the device from the site. Interfaces to various stable climate computers are available.



Software µLink – µMETOS® zt comes with the comprehensive and easy to operate software platform µLink which allows all kinds of useful tables as well as graphic presentations. With one software license an unlimited number of stations can be managed. µLink is an open software platform with various data export features as well as an e-mail function which allows data to be sent automatically via Internet.



Simple and fast disinfection of the device – µMETOS® zt is built in a way that fast and secure disinfection of the main unit and the sensors are possible. This feature allows the user to move the unit whenever needed from one stable to another without long quarantine (delay).

### Technical data and models

µMETOS® zt: Logger Power Supply: 6 x 1.5 Volt AA Battery  
 Dimensions: IP 65 housing  
 Working temperature of Logger: -30 to 60°C (-24 to 140°F)  
 IR Interface: 115Kb Water tight connectors

µMETOS® zt Logger Power supply: 6x1,5 Volt AA battery  
 Length 270 mm (11.7 inch) Diameter 115 mm (5 inch)  
 Working temperature of Display: 0 to 60°C (30 to 140°F)  
 Memory size: 2 MB Weight: 600 gr

Model - Type  
 ZTR 100  
 ZTR 200  
 ZTF 300

Standard models  
 Datalogger, Display, Temperature, Relative Humidity, Brightness  
 Datalogger, Display, Temperature, Relative Humidity, Brightness, Junction box, IR main body building temperature, Noise, Restlessness (motion) with option to ammonia content in the air  
 Datalogger, Display, Temperature, Relative Humidity, Brightness, Global radiation, Junction box, Black body temperature, and optional sensor for winds speed and precipitation.

Technical data sheet loading