

# Clinical Validation

## Something new for the surgery

### PULSOVET 3000-DS, the ECG monitor with stethoscope employed in veterinary medicine

Veterinary anaesthetist R. Vogt (Vetsuisse Faculty of the University of Zurich) tested the new PULSOVET 3000-DS over a one month period in the course of his clinical duties in the small animal clinic of the animal hospital in Zurich.



The new ECG monitor with stethoscope was used by veterinarian R. Vogt in his normal daily activities as anaesthetist, particularly during the pre-anaesthetic examination and the general examination in the emergency service. Thanks to its newly developed ANTI-INTERFERENCE-SYSTEM technology the stethoscope has excellent properties for listening to the heart and lungs of dogs and cats. An adapted examination technique is required to achieve clear auscultation in smaller animals.



Using the PULSOVET 3000-DS ECG (I, II or III-lead) data is derived in seconds with the aid of three integrated goldplated electrodes on the stethoscope or the additional ECG cable with clip electrodes. PULSOVET works as a stethoscope and is also scarcely any heavier. R. Vogt found the direct ECG lead through the integrated electrodes to be the most useful. This works mostly with minimal preparation of the contact points, for example by moistening with alcohol and parting the fur.

A stethoscope is an indispensable instrument for examining the cardiovascular system and lungs. The combination of stethoscope and ECG device has the added advantage of being able to reliably recognise cardiac irregularities and distinguish between them.



#### Applications (Examples):

Control/monitoring of ventricular extrasystoles in dogs that have been involved in accidents (Posttraumatic myocarditis) or following torsion of the stomach (in dogs).

Electrolyte changes (increased K) Arrhythmia: differentiating respiratory sinus arrhythmia (in dogs) from a pathological arrhythmia.

Resuscitation: recognising cardiac electrical activity, atrial/ventricular fibrillation, electrical dissociation.  
ECG monitoring during anaesthesia in surgery.

