

OUNCIO

URINE MICROSCOPY IN THE PALM OF YOUR HAND

fluidlab 1



Introducing the all new anvajo vet

fluidlab 1

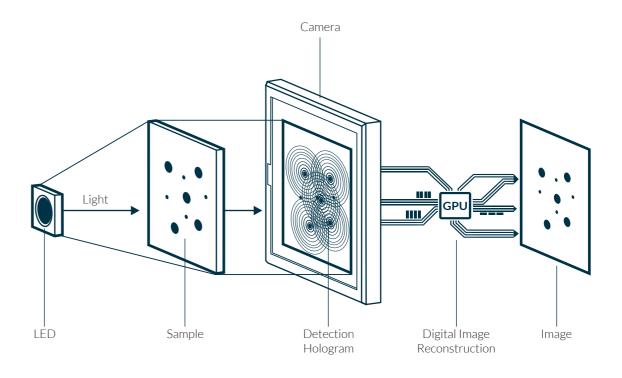
Microscopic examination of urine is one of the most often performed and valued POC-tests in veterinary diagnostics. It is carried out to screen for and monitor diseases and conditions such as urinary tract infections or kidney disorders within animals. As automated techniques are very expensive for primary care usage and manual measurements can lead to inaccurate results, veterinarians struggle with the drawback of unstandardized analysis.

With its state-of the art quantitative phase imaging technique the anvajo vet fluidlab 1 allows automated urine microscopy of **uncentrifuged urine** and can thus enable faster diagnoses through the POC methodology and the elimination of unnecessary intermediate steps in sample preparation.



Technologic introduction

Digital holographic microscopy (DHM) is an innovative technique newly introduced also to the veterinary in vitro diagnostic field. In DHM, the sample is illuminated with light. As light passes through the sample, some of it gets diffracted according to its refractive index while some travels through without 'seeing' the sample. Behind the sample, the diffracted light interacts with the non-diffracted light, thus creating a hologram as it hits the camera. The hologram is then reconstructed digitally to retrieve an image, which contains valuable information about the different elements like blood cells, crystals or casts distributed within the sample.



Parameters



Red Blood Cells



White Blood Cells



Epithelial Cells



Crystals



Casts

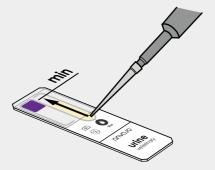


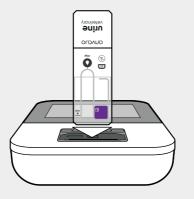
Bacteria (flagging of suspected presence)

Workflow

The device is intended for analysis of **native uncentrifuged urine** from cystocentesis, catheterization or free catch.







- 1. Collect your samples in a sterile manner. Fill in all patient information on your device.
- 2. Take a sample carrier out of the box. Mix the sample properly and aspire right away to avoid sedimentation. Fill the sample carrier completely up to "min"-mark with $20\,\mu l$ urine.
- 3. Insert the sample carrier into the device and start the measurement immediately. You'll receive the results within a few minutes.
- 4. Scroll down through the result screen to see all information and the microscopic image. Measurement can be saved and additionally also transferred to a computer.





Advantages



Collecting samples, conducting analysis and interpreting results is easier than ever. Easy 3-step operation and minimal maintenance makes this device a perfect tool to be used in a primary care.



The anvajo vet fluidlab 1 is the smallest urine microscope unit globally available. Its handheld size and self-contained battery empowers comfortable use not only in your practice but also directly on the field.



Accurate and reliable

Automated and standardized analysis of urine samples eliminates subjective interpretation and increases accuracy of your results that nicely correlates with traditional laboratory instruments.



Rapid

Immediate analysis of samples without additional processing, results reported within a few minutes and their intuitive presentation are not only radically streamlining the general workflow and increasing the result quality but also enable making quick clinical decisions and enhancing patient care.



Innovative Workflow

Reduce the workflow complexity and have more time to make safe clinical decisions for better patient care.

Workflow with the anvajo vet fluidlab 1:



VS.

Workflow without the anvajo vet fluidlab 1:



Technical Specifications



Technical Specifications	
Method	Digital Holographic Microscopy (DHM)
Sample Volume	20 µL of uncentrifuged urine
Parameters	Red Blood Cells, White Blood Cells Epithelial Cells (Squamous, Non-Squamous) Crystals (Calcium Oxalate dihydrate, Struvites, Unclassified) Casts (Hyaline, Non-Hyaline) Bacteria (flagging of suspected presence)
Microscope Resolution	3 μm – 100 μm
Sample Carrier	Urine Veterinary
Sample identification	Sample ID via manual entry
Connectivity	802.11 b/g/n Wireless LAN
Dimensions	128 x 94 x 33 mm
Operation Temperature	10 °C to 40 °C
Humidity	< 80 %, without condensation at 31°C
Weight	240 g
Battery Runtime	5 hours *
Display	3.5" Color Touch Screen
Input Voltage	5 V DC via USB-C Power Adapter
Power Adapter	230 V AC ± 10%, 50 Hz
Data Storage	Internal Flash Memory

^{* =} Battery claims depend on network configuration and many other factors; actual results will vary. Battery has limited recharge cycles and may eventually need to be replaced by anvajo. Battery life and charge cycles vary by use and settings.





anvajo GmbH, a spin-off biotech company from Dresden University of Technology, developed a portable device for point-of-care fluid analysis after six years of research that has the potential to be used in a wide variety of industries.

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