

The Ekomilk-AMP system at €0.03 per test, an overview



Parameters measured by Ekomilk-AMP, for bulk tanks and animals

Standard Parameters (EHU version):

- SCC (somatic cell count)
- Fats
- Proteins
- Solids without fats (SNF)

Optional, measured on-demand for EHU:

- **Acidosis and ketosis indicator** (animal health)
- **Lactose indicator**
- **Added water, density, freezing point indicators** (adulteration)

Ekomilk-AMP system description

The system includes an Ekomilk Horizon instrument which comes in 2 different models: Ekomilk Horizon Unlimited (EHU) and Ekomilk Horizon Essential (EHE). Each EH comes together with a user account for the “Animal Monitoring Platform” (AMP) besides optional accessories and/or sensors.

Accuracy

The Ekomilk-AMP system has a **powerful online calibration engine** which allows obtaining **unparalleled accuracy** over an extended range of each milk parameter. Accuracy guarantees for each measurement are possible (under conditions).

Calibration

The AMP system architecture allows for an **unlimited amount of calibration profiles** besides **semi-automatic calibration updates** (seasonal and breed detection). Relative to older Ekomilk models, this translates to over a hundred “**calibration channels**” for each Ekomilk-AMP system. This means that you can calibrate accurately for many milk types (raw, pasteurised, UHT, recombined powder, different breeds and animals).

Integrity & supervision

The excellent accuracy is facilitated thanks to the automatic supervision via the "integrity monitoring" module. Every analysis (measurement) is verified for integrity: an anomaly in the sample or in the measurement result will be clearly indicated (flagged and with optional notification over SMS and email).

Similarly, the whole system is monitored continuously for security purposes and for any errors appearing. There is a responsive team for ensuring you a smooth experience and satisfying support.

Automatic data transfer

There is a full notification system over SMS, email with CSV and online app with dashboards for instrument notifications and for measurement results. You can also opt for the on-demand automatic data transfer to your database or server (via Cloud API, for instance in XML or JSON format).

Ketosis & Adulteration

Acidosis and ketosis indicators can be added via the online AMP account, like lactose and added water for adulteration detection (on-demand, Q4 2018). The cost per test remains approx. €0.03 EXW

WiFi & peripherals

AMP manages and secures the Wifi end-points even over unstable internet connections. AMP also enables to use Barcode reader and RFID data. There is integrated solid Wifi and USB stick workflow support. Such workflow support will prevent you from losing data files or from uploading the same data file twice. RJ45 (ethernet), NFC and Bluetooth connectivity besides custom peripherals connection are on demand.

Milking robot

There is also a special Ekomilk-AMP version for milking robots which allows direct connection to milking robots (also called automatic milking systems, voluntary milking systems, robotic milking systems):

[Milking Robot Test >](#)

No Shuttles and no sample transport needed anymore: on-farm real-time analysis.

Milk quality dashboards

For decision making you will have automatic subclinic mastitis dashboards and milk composition dashboards on individual and on bulk tank level. No need to crunch numbers and results in long tables.

The milk quality evolution of a cow or a herd will be clear on the dashboards and graphs (and tables are still available).

Maintenance program

AMP provides, depending on the model, automated instrument cleaning and a comprehensive instrument maintenance program for hassle-free reliable operation and increased longevity of the instrument. The Ekomilk-AMP system features a real-time instrument monitoring and instrument diagnostics module.

Cow and tank identification

For easy cow and bulk tank identification, there is a flexible template system and a connection for an external USB keyboard. Both multi-digit national IDs and 4 digit local IDs can be used simultaneously to identify each sample, track the history and create automatic dashboards.

Automation

The AMPI Sample Feeder (SF) provides automatic sample preparation and sample supply. Many common milk analysis errors are caused by incorrect (manual) sample preparation. With the SF, sample preparation is automated and common measurement errors are avoided or at least detected and flagged. Insert a tray of samples in the SF and you are ready to go. You will receive SMS when your intervention is needed and when it is time to insert a new sample tray.

[Video of complete system with SF >](#)

Custom branding admin interface & 3rd party modules

For partners and distributors, there is an option for custom branding for user communities and specific organisations. The powerful admin interface enables you to follow instruments from your organisations in real-time and provide extra services. There are also Cloud APIs to connect your own modules and sensors with AMP.

The new Ekomilk-AMP system is used worldwide, on-farm and by major milk processors, pharmaceutical industry, veterinary cabinets and dairy herd improvement organisations (also known as Controle Laitier, DHI, Control Lechero).

Please contact us for more details and specifications.