

EKOMILK[®] AMP

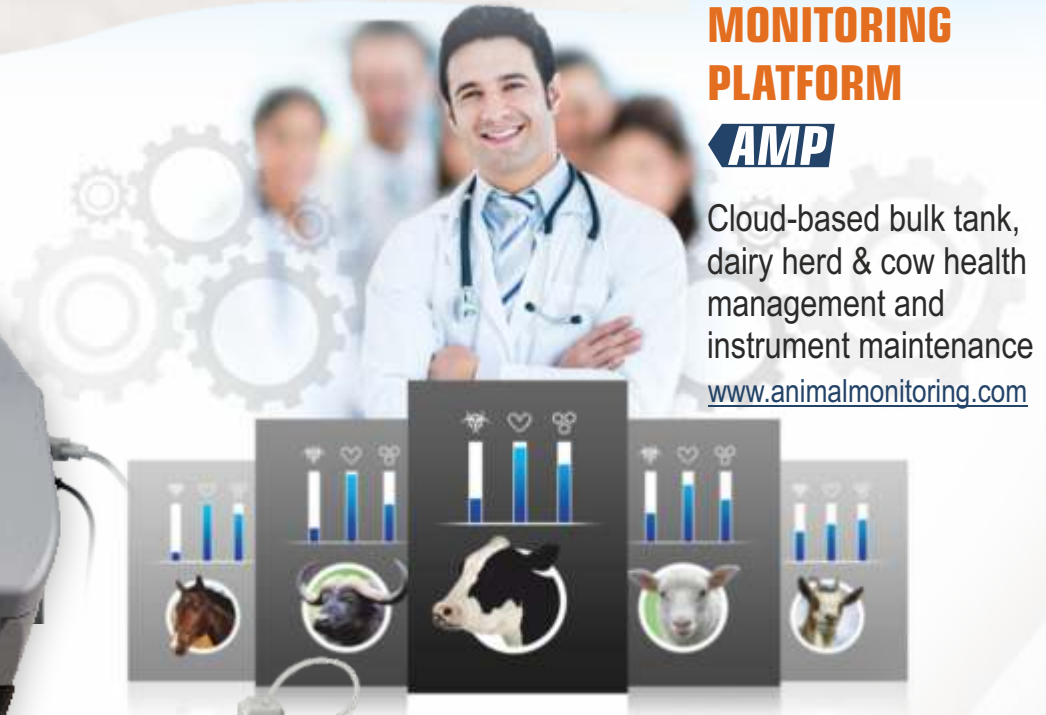
COMPLETE SYSTEM FOR ACCURATE MASTITIS AND MILK QUALITY CONTROL

Hybrid Milk Analyzer

EKOMILK HORIZON UNLIMITED (EHU)

**EKOMILK[®]**
*Horizon*Somatic Cell Count (SCC) and
milk parameters measurement

- Automated and reliable;
- Fast and cost-effective;
- High accuracy;
- Integrated Wi-Fi module for remote monitoring



ANIMAL MONITORING PLATFORM

AMPCloud-based bulk tank,
dairy herd & cow health
management and
instrument maintenance
www.animalmonitoring.com

SAMPLE FEEDER

Peripheral device for
automatic milk sampling
and feeding

- Flexible process automation;
- Autonomous processing of 49 milk samples;
- Processing time around 1 hour;
- Auto cleaning function

approx.

€0.03
per testSEAL OF
EXCELLENCECertificate delivered by the European Commission,
as the institution managing Horizon 2020,
the EU Framework Programme for Research and Innovation 2014-2020

The project proposal 756688, MastCloud

System Applications:

dairy farms with a conventional milking parlor
dairy farms with milking robots
large labs testing over 100 000 samples per year
small labs vet cabinets milk processors
mobile labs for milk collection

EKOMILK[®] AMP

SOMATIC CELL COUNT & MILK PARAMETERS

Milk parameters	Cow / Tank	Measuring range and accuracy	
Somatic Cell Count	Cow / Tank	80 000	15 000 000 cells/ml ± 8%
Fat	Cow / Tank	0,5%	12% ± 0,04%
Protein	Cow / Tank	1,0%	9,0% ± 0,14%
Solids not fat (SNF)	Cow / Tank	6%	12% ± 0,2%
Temperature	Cow / Tank	0°C	50°C ± 0,1%
Conductivity	Cow / Tank	1,0 mS/cm	10 mS/cm ± 0,2 mS/cm
Density	Tank only	1,0200	1,0400 g/cm ³ ± 0,0005 g/cm ³
Freezing point	Tank only	-1,000°C	0,000°C ± 0,015°C
Added water	Tank only	0,0%	60% ± 5%
Lactose	Cow / Tank	0,5%	7% ± 0,2%
Acidosis & Ketosis	Cow / Tank	Ultrasound and AI based detection	

The accuracy of SCC, Protein, Fat and SNF are achieved after AMP calibration finetuning and valid for ICAR-compliant milk samplers;

Lactose, Acidosis & Ketosis indicators are available only via AMP on demand;

All specifications are preliminary and can be changed without prior notice

SYSTEM CONFIGURATIONS



EKOMILK[®] AMP

Mini-lab for fully-automated, on-farm, fast and reliable SCC and milk parameter analysis at €0.03/test in around a minute per measurement.

Animal Monitoring Platform - Result Transfer, Workflow Integration and Measurement Supervision

AMP Standard package:

- Admin User Account with up to 1000 cows per farm;
- Automatic Data Transfer via integrated solid Wifi and USB stick workflow support;
- Powerful online calibration engine which allows to obtain unparalleled accuracy over an extended range of milk parameters;
- Automatic dashboards on bulk tank, on individual cow and on herd level;
- Real-time raw results viewing; mastitis visualization and monitoring;
- Efficient sample identification processes;
- Instrument maintenance program;
- Comprehensive notification platform via SMS, email and apps - receive measurement results and instrument warnings on any device anywhere

Optional:

- Up to 20 000 cows per farm and unlimited farms;
- Customized calibration services incl. automatic seasonal calibration update;
- Extra animal health indicators - lactose, acidosis and ketosis.
- Custom branding admin interface & 3rd party modules & APIs

1-year standard AMP admin account is included with every system

EKOMILK[®] Horizon

ESSENTIAL (EHE) +AMP

Automated milk analyzer for fast and effective control of SCC in dairy farms and processing plants

EKOMILK[®] Horizon

UNLIMITED (EHU) +AMP

Automated hybrid milk analyzer for SCC and milk parameters measurement

EKOMILK[®] Horizon

ROBOT VERSION (EHR) +AMP

Direct simple connection to milking robots; Real-time analysis allowing immediate action for sick animals

EKOMILK[®] AMPI SAMPLE FEEDER (SF) +AMP

Peripheral device for automatic milk sampling and feeding to the analyzer for fast milk parameters' analysis

ISO 9001
CE

Supply & Distributed By:

WWW.WAGAGROUP.LK

WAGAGROUP
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EKOMILK[®]
Horizon



1. EKOMILK HORIZON UNLIMITED

An automated ultrasound hybrid milk analyzer for multi-parameter milk measurement (Fat, SNF, Density, Protein, Temperature, Conductivity, Freezing point, Added water to milk) & Somatic Cell Count.

The measuring results are automatically transferred to Animal Monitoring Platform (AMP) for easy visualization, monitoring and analyzing. The analyzer is equipped with build-in ESC POS Printer, USB Host port with Flash Drive and Numeric keyboard support.

The regular milk control in a dairy farm is the main part of process of prevention, detection and medical treatment of subclinical mastitis – the most important dairy disease. The proper incoming milk control in dairy enterprises guarantees a high-quality and ecologically pure products

Key Features:

- ✓ Automated measurement;
- ✓ Proven viscosity method;
- ✓ Fast and cost-effective analysis at average price of € 0.03 per test;

- ✓ Flexible workflows for identification of milk samples per tank, cow and udder quarter;
- ✓ Real-time measurement supervision & instrument diagnostics over WiFi;
- ✓ Custom XLS export report per organisation (farm), date, instrument, source, instrument diagnostics, cow or tank ID;
- ✓ Automatic HTML emails with XLS result reports;
- ✓ Automatic graphs and dashboards per farms, cow, quarter and bulk tank;
- ✓ Embedded Real time clock;
- ✓ USB Host port with Flash Drive and Numeric keyboard support;
- ✓ ESC POS Printer - built in;
- ✓ Integrated Wi-Fi for remote access, e-mail, SMS;
- ✓ 1-year international warranty

Milk parameters	Cow/Tank	Measuring range and accuracy
Somatic Cell Count	Cow/Tank	80 000 ÷ 15 000 000 cells/ ml ± 8 %
Fat	Cow/Tank	0,5% ÷ 12% ± 0,04 %
Protein	Cow/Tank	1,0% ÷ 9,0 % ± 0,14 %
Solids non fat (SNF)	Cow/Tank	6% ÷ 12% ± 0,2%
Temperature	Cow/Tank	0°C ÷ 50°C ± 0,1 %
Conductivity	Cow/Tank	1 mS/cm ÷ 10 mS/cm ± 0,2 mS/cm
Milk density	Tank only	1,0200 ÷ 1,0400 g/cm ³ ± 0,0005g/cm ³
Freezing point	Tank only	-1,000 ÷ 0,000°C ± 0,015°C
Added water to milk	Tank only	0% ÷ 60% ± 5%
Lactose*	Cow/Tank	0,5 % ÷ 7 % ± 0,2%

Notes:

- *The accuracy of SCC, Protein, Fat and SNF are achieved after AMP calibration finetuning and valid ICAR-compliant milk samplers.*
- *Lactose indicator is available only via AMP on demand*

Operating conditions:	Ambient temperature	15°C ÷ 30 °C
	Relative ambient humidity	30% ÷ 80%
Technical specifications:	Dimensions (WxDxH):	270 x 320 x 320 mm
	Weight	< 6.5 kg
	Power consumption (avg.)	< 50 W
	AC Power Supply voltage	100 - 240VAC +10/-15% 50/60 Hz
Milk Sample Requirements:	Milk Sample Temperature:	15°C ÷ 25°C
	Age of Milk Sample:	Testing of the milk sample later than 12 hours after milking can have influence on the accuracy of somatic cell measuring if the sample is not properly stored and prepared.
	Milk Type*	2 types of milk <i>*Currently somatic cell measuring is available for raw cow milk only.</i>

Parts, accessories and spare parts

Milk Analyzer Ekomilk Horizon	1 pc.
Power Supply (Model AC/DC-CL-DT 12/10; In AC 100 – 240V; out DC 12 V; 10A; 120W)	1 pc
User's guide	1 pc
Hose for waste milk (8x10 mm, 650 mm)	1 pc
Measuring flask	2 pcs.
Brush for funnels cleaning	1 pc
Measuring mug 50 ml	1 pc
Ekoprim powder (container 200 g)	2 pcs
Rubber balloon	1 pc.
Nylon Wires for capillary cleaning	1 pc.
Cleaning set (powder) Ekoday & Ekoweek	1 set
Conductivity solution	1 pc
Additional Items	
Syringe (50 ml) with hose for funnel antiblockage	1 pc.
USB Flash Drive – 8 GB	1 pc.
Ekoprim powder (packet -18 g)	3 pcs
Thermal printer roll	2 pc.
Cable Tie with Plastic tongue (100x2.5 mm) (spare parts)	6 pcs.
Hose for water & milk peristaltic pumps (4x6 mm, 90 mm) (spare parts)	2 pcs.
Hose for Ekoprim peristaltic pump (4x6 mm, 100 mm) (spare parts)	1 pcs.
Funnel A & B (set)	1 set
Measuring Flask	1 pc.
Filter	1 pc.
Syringe 5 ml	1 pc.

2. ANIMAL MONITORING PLATFORM (AMP) Professional Guide in Animal Health and Milk Quality Management

ANIMAL MONITORING PLATFORM (AMP) No matter how many instruments or peripherals, AMP provides the system backbone for reliable measurements, instrument diagnostics & maintenance; sample identification and flexible result reporting besides calibration and optional custom integration into workflows and with your APIs . AMP is a cloud-based solution with data collection & processing modules, automated user-friendly dashboards and remote instrument diagnosis module, combining data from databases, instruments and touchscreen inputs.

AMP Standard Admin Account Package:

- Admin User Account with up to 1000 cows per farm;
- Automatic Data Transfer via integrated solid Wi-Fi and USB stick workflow support;
- Automatic dashboards on bulk tank, on individual cow and on herd level;
- Real-time raw results viewing; mastitis visualization and monitoring;
- Efficient sample identification processes per bulk tank, farm or milking parlor, cow and udder quarter;
- **Instrument diagnostics and maintenance guidance program;**
- Comprehensive notification platform via SMS, email and apps - receive measurement results and instrument warnings on any device anywhere

AMP Special Distributor Account or Pharma Account Package:

AMP Special Distri or Pharma Account provides structured monitoring and a strategic advantage besides large efficiency gains for collaboration and after sales support. With this special account, you can follow in real-time (via Wifi) all your Organisations and Settings can be chosen independently per Organisation. The distributor can create new Organisations and Admin Accounts and manage the users on organization level. This special account allows to avoid data migration costs later.

- Up to 20 000 cows per farm and unlimited farms;
- Result reporting per organisation, data separation between organisations;
- Settings can be chosen independently per organisation

Special AMP pharma or distributor account is calculated for purchase of more than one unit Ekomilk Horizon. Please ask for details and subscription fee if applicable.

Training and supervision:

With the purchase of the instrument customer receives training installation video and quick start guide. It is possible to provide initial training by request of two on-line sessions with video, one-off fee. The training is focuses on the instrument configuration, instrument menus, brief set-up of the AMP user account over Wifi, sample identification and data transfer options, detailed cleaning instructions, etc.

Please contact WAGA to order initial training.