



We make the invisible visible!

MIRIS Farm Milk Analyzer

FMA- A new management tool for dairy production

Calculating the energy demand for dairy cows both the milk yield and milk composition must be considered. With an instrument available on the farm you have a simple management tool for efficient and optimal feeding control of the dairy cows.

An easy-to-use mastitis indicator for individual cows is provided in the programme module MASTITIS.

FMA is a robust management tool for optimal production efficiency. It can be used regularly by the farmer and the adviser as well.



MIRIS FMA Basic



FMA- A new IR-instrument for milk analyses on the farm

With the infrared instrument FMA Basic, it is possible to analyse the composition of unhomogenised raw milk for the content of **fat and protein** on the farm. A small, robust instrument without any moving parts, designed to be used in a demanding environment are the characteristics of the instrument. The analytical technique used in FMA is a combination of the established infrared analytical principle

and a patent-pending innovation. The FMA is available as either a stand-alone instrument or can be integrated into your management system. The analytical accuracy of FMA is ideal for management purposes on the farm. Several milk components are simultaneously analyzed. The results are presented with one decimal directly on the display or in your PC-management programme.

Features

- Reliable
 - Robust construction, without moving parts
 - Simple control and adjustments to keep measurement performance
 - Memory with high storage capacity and battery back-up
- Environment
 - Analyses without chemicals and cleaning with harmless detergents
- Flexible
 - Stand-alone or connected to an external PC
 - Possibilities to make Slope and Bias adjustments against national reference samples
- Future proof
 - Easy to upgrade the soft-ware
- Mastitis indicator
 - Chemical-free indication of mastitis
- Measurement range
 - Unprocessed milk (cow, buffalo, sheep, goat, camel)
 - Fat 0-15%
 - Protein 0-8%

Technical data

- Dimensions (h x w x d) 98 x 267 x 236 mm
- Weight 3000g
- Power supply 9V 3A DC
- PC connection USB for transfer of data and upgrading programs
- Display TFT screen, 240*320 pixels
- Sample temperature +20 - +40°C¹
- Ambient air temperature +15 - +38°C²
- Storage capacity 2000 measurements (time-stamped and numbered)
- Back-up of measurement data ~1 week without power supply attached
- Operative system Windows CE
- Measurement performance
 - Repeatability (SD): < 0.1%
 - Accuracy (SD): < 0.1%
- Shown value 1 decimals
- Time for analysis < 60 seconds/sample
- Analytical method Infrared transmission spectroscopy
- Standards CE approved for EMC and LVD

1. For optimum results preheating of the samples to 40°C is recommended

2. Depending on local conditions it is possible to adjust the FMA for higher ambient air temperature than 38 °C

Consumables

- Start-kit: Contains syringes, detergents, Power Cord (and AC/DC converter), USB Cable for program installation and file transfer, CD with manual and software for data transfer to computer, quick guide, spare parts to in and outlet, rugged carrying case
- Maintenance kit: Contains syringes, detergents and spare parts to in and outlet

Options

- On-line data transfer: RS232 Cable for transferring the results on-line to a PC with a Windows based terminal function
- Receipt printer: A portable thermal printer for direct out- print of results