

**ULTRASONIC MILK ANALYSER BASED ON MS WINDOWS AND DATABASE APPLICATION**

**Lactoscan LW based on MS Windows**

High-end ultrasonic technology for analyzing any kind of milk



- Internet Cloud Services
- e-mail & SMS support
- Multi-language support
- Touch-screen display
- Wireless keypad and mouse

**KEY FEATURES:**

- User-friendly: simple in operation, maintenance, calibration and installation
- Portable and compact design
- Very small quantity of milk required
- Low power consumption
- No use of hazardous chemicals
- One year full warranty

**SPECIFICATIONS Lactoscan LW:**

Parameter	Measuring range	Accuracy
Fat	from 0.01 % to 45%	± 0.06%
SNF	from 3% to 40%	± 0.15 %
Density	from 1000 to 1160 kg/m <sup>3</sup>	± 0.3 kg/m <sup>3</sup>
Protein	from 2% to 15%	± 0.15%
Lactose	from 0.01 % to 20%	± 0.20%
Added Water content	from 0 % to 70 %	± 3.0%
Temperature of milk	from 5°C to 40°C	± 1°C
Freezing point	from - 0,400 to - 0,700°C	± 0.005 °C
Salts	from 0,4 to 4%	± 0.05%
pH	from 0 to 14	± 0.05%
Conductivity	from 2 to 14 mS/cm	± 0.05 (mS/cm)
Kg	from 0 to 150 kg	± 0.025 kg
Total solids	from 0 to 50 %	± 0.17%

**(option) 50 sec., 30 sec., 20 sec. measurement**

Milk analyzer Lactoscan makes quick analysis of milk and liquid dairy products:

- |                |                          |  |
|----------------|--------------------------|--|
| Cow milk (25%) | Whey                     | Concentrated milk (up to 1160kg/m <sup>3</sup> ) |
| Sheep milk     | Cream (up to 45%)        | Recovered milk                                   |
| Buffalo milk   | Skimmed milk (0,01% FAT) | Etc.   |

And can be calibrated by the customer with specific samples of: Yoghurt, Flavoured milk, Ice-cream mixtures etc.



**MEASURING PARAMETERS:**

- Fat
- Solids-non-fat (SNF)
- Total Solids
- Density
- Protein
- Lactose
- Milk sample temperature
- Added water
- Salts
- Freezing point
- pH
- Conductivity
- Kg
- Ion meter

This project is co-funded by the European Union



### ENVIRONMENTAL CONDITIONS:

Ambient air temperature  
10°C - 40°C (option 43 °C)  
Milk temperature 1°C - 40°C  
Relative humidity 30% - 80%

### ELECTRICAL PARAMETERS:

Switching Adapter  
Input: 100 - 240 V ~ 1.6 A max.  
50-60 Hz  
Output: +12 V 4.17A min.  
Output power: 50 - 65 W

### MECHANICAL PARAMETERS:

Dimensions: (W x L x H)  
250x290x300 mm  
Weight: 7 kg  
Stainless steel box

### Functions:

- Input information
- Communication - SMS and e-mail
- Active Formulae
- System log

### Tables and formulae - deliverers and price

- Reports:  
shift, daily, monthly,  
deliverer daily report,  
deliverer monthly report

### Database services:

- Archive DBRes
- Restore DBRes
- Init DBRes
- Archive DBDel
- Restore DBDel
- Archive all Databases
- Restore All Databases
- DB Server

buy online on  
www.lactoscan.com



## ULTRASONIC MILK ANALYSER WITH MS WINDOWS AND DATABASE APPLICATION

HDMI (option)

pH probe Input

12V Output

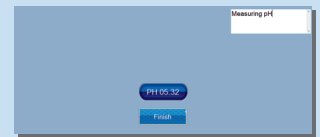
12V Input

Power switch

Option:  
automatic cleaning

pH measuring system  
(degree of acidity) (option)  
In-flow pH measuring system  
(degree of acidity)  
All parameters - measured in a  
single sample

Integrated pH meter



USB ports  
(printer, bar-code reader,  
keyboard and mouse,  
remote display and weight scales)

RS232 interface port  
(connection for remote display  
and weight scales)



### LactoScan Analyser - Database (LSAn-DB)

LSAn-DB collecting information from Lactoscan® compatible measurement files and creating reports consistent with predefined formulae.

The application saves data collected to a MySQL database.  
**Local and Cloud Based DB**



### Cloud Database Application.

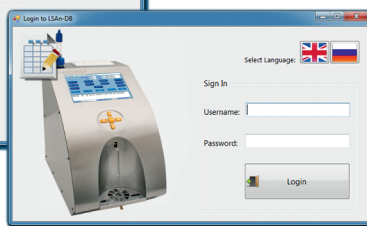
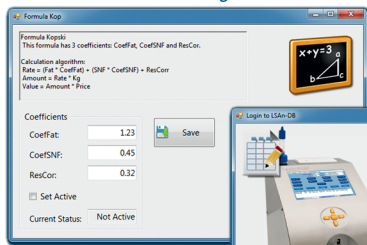
Total solution for milk collecting process.

Windows tablet, wireless, cloud services based system:

- Easy to use, integrated, internet based;
- Automated farmer identification (bar-code card);
- Real-time SMS and e-mail alerts;
- Remote back-up support and maintenance, updates;
- Payment schemes calculations;
- Real-time online access to milk data;

### Advantages:

- remote modification of the rate-charts
- remote support and maintenance
- remote alert for changes in calibration



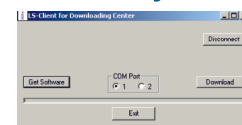
Milkotronic Dairy United - Nova Zagora  
Report generated: 2015-11-29 15:33:05

Report for: 2015-04-09 | Type of report: Shift / Large | Shift: Morning

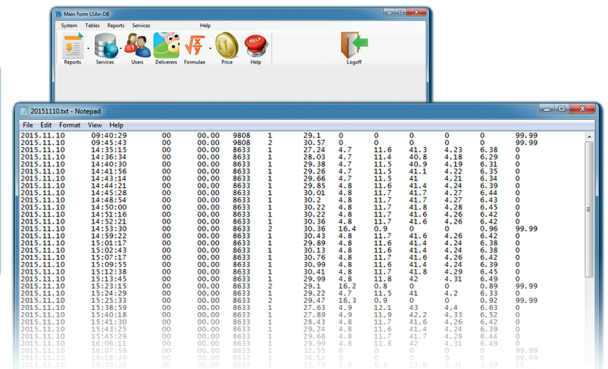
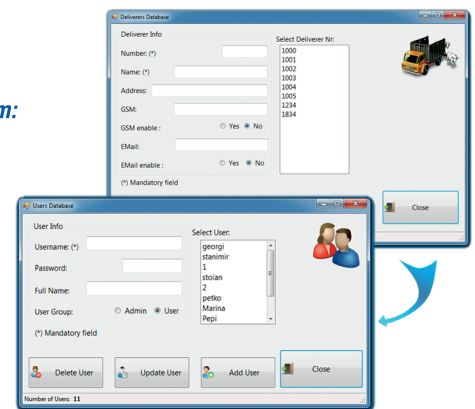
Calibration type: 2							
Time	Deliverer	Litres	Fat	SNF	Rate	Value	
11:57:48	1001	1.34	3.97	22.69	20.12	26.96	
09:57:03	1114	12.83	4.33	25.24	4.54	56.89	
09:55:21	1234	2.5	4.11	23.92	5.56	13.90	
09:58:23	1914	32.57	4.03	24.21	5.56	181.09	
09:59:30	2924	34.50	11.66	22.29	4.54	156.63	
Average Fat:		7.23	Average SNF:		23.54	Average Rate:	0.48
Total Amount:		435.47	Total Quantity:		83.44	Total Value:	5608.80

Calibration type: 3						
Time	Deliverer	Litres	Fat	SNF	Rate	Value
11:58:12	1002	3.45	3.87	23.69	4.54	15.66
10:26:39	1234	10.54	4.22	24.92	5.56	56.80
10:45:32	3200	17.57	4.43	22.91	11.24	197.49



Internet Remote  
Firmware Update  
(Download Center)



### Milk conductivity measuring system (option)

Milk conductivity changes depending on  
concentration of ions in the milk.

Milk conductivity can be used for:

- test of udder health (detection of subclinical mastitis);
- control of water evaporation grade in condense milk production;
- determination of dry milk solubility rate.