

**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 MCCW:**

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 - delivers 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

**ULTRASONIC MILK ANALYSER  
WITH MS WINDOWS AND  
DATABASE APPLICATION**

**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)

**HDMI**

**pH probe Input**

**12V Output**

**12V Input**

**Power switch**

**Option:  
automatic cleaning**



**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:**

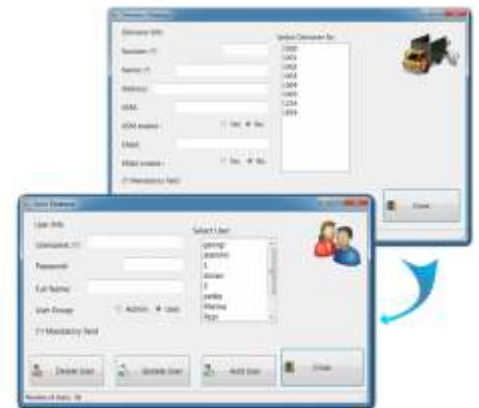
- Easy to use, integrated, internet based;
- Automated farmer identification (bar-code card);
- Real-time SMS and e-mail alerts;
- Remote back-up support and maintenance, updates;
- Payment schemes calculations;
- Real-time online access to milk data;

**Advantages:**

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



**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.



Miltronics Dairy United - Nova Zagora  
Report for: 2815-04-08 | Type of report: Shift / Large | Shift: Morning

Calculated type 2							
Time	Delivered	Litres	Fat	SNF	Case	Amount	Value
11:57:48	1302	1.39	3.87	32.88	30.12	36.86	347.26
12:07:00	1113	13.03	4.26	28.24	4.31	36.88	732.89
12:15:21	1234	9.3	4.13	23.94	5.26	33.76	775.07
12:24:29	1914	32.87	4.08	24.21	5.46	38.18	2054.43
12:33:53	1924	34.55	11.68	22.26	4.54	39.03	2017.33
Average Fat: 7.23		Average SNF: 23.54		Average Case: 6.45		Total Value: 5008.90	
Total Amount: 435.47		Total Quantity: 93.44					
Calculated type 3							
Time	Delivered	Litres	Fat	SNF	Case	Amount	Value
11:58:14	1304	3.45	3.87	33.09	4.26	35.06	351.24
12:03:58	1234	10.94	4.26	24.86	5.46	38.06	744.85
12:03:53	1205	17.07	4.43	23.91	11.34	347.49	1040.63

distributors: