

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

**Lactoscan Milk Collecting Center
based on Windows OS (MCCW)**

*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 ³	± 0.3 kg/m ³
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%

50 sec., 30 sec., 20 sec. measurement

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

- | | | |
|-----------------------|---------------------------------|---|
| <i>Cow milk (25%)</i> | <i>Whey</i> | <i>Concentrated milk (up to 1160kg/m³)</i> |
| <i>Sheep milk</i> | <i>Cream (up to 45%)</i> | <i>Recovered milk</i> |
| <i>Buffalo milk</i> | <i>Skimmed milk (0,01% FAT)</i> | <i>Etc.</i> |

*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*



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)

390 x 300 x 260 mm

Weight: 5.5 kg

Plastic cover 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



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

pH probe Input

12V Output

12V Input

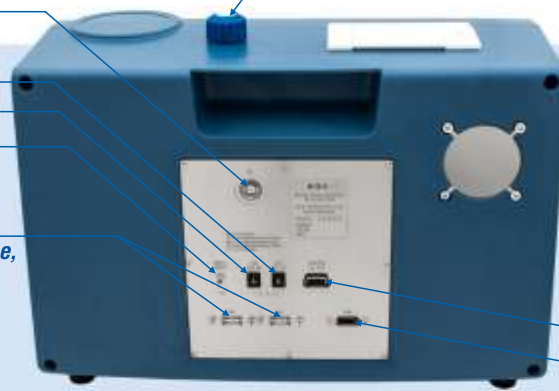
Power switch

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

Integrated pH meter

RS232 interface port

HDMI



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 for: 2015-04-08 | Type of report: S&R / Large | Shift: Morning

Calculation type 2						
Time	Deliverer	Litres	Fat	S&R	Rate	Amount
11:37:49	1501	1.36	8.97	22.68	83.12	26.86
11:37:59	1118	13.08	8.39	22.24	8.06	86.88
11:38:01	1239	2.2	8.11	23.39	8.06	33.95
11:38:02	1816	22.67	8.02	24.21	8.06	181.08
11:38:03	1824	34.50	11.08	22.26	8.06	180.83
Average Fat: 7.25		Average S&R: 23.54		Average Rate: 0.48		
Total Amount: 435.47		Total Quantity: 95.44		Total Value: 5808.80		
Calculation type 3						
Time	Deliverer	Litres	Fat	S&R	Rate	Amount
11:38:12	1502	3.45	8.87	23.08	8.06	35.08
11:38:14	1239	13.56	8.02	24.36	8.06	89.80
11:38:15	1205	17.07	8.83	23.81	11.20	187.48



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.