

ELECTRONIC MILK ADULTERATION TESTER

EMATTM



Application

The **Electronic Milk Adulteration Tester (EMAT)** is an ideal and low cost solution to discriminate between genuine and spurious milk. It detects adulterants in raw milk, which are hazardous to human health.

The EMAT works on the principle of detection of specific ions of adulterants present in the milk sample. The detection procedure follows the steps of intake, dilution, mixing and analysis.

Detected signal is processed through embedded software and results are displayed quickly and accurately on a digital display for the convenient read-out by the user.

The instrument is accurate, simple, economical, reliable and rugged to identify adulterants present in the Milk.

The instrument is suitable for the Village Milk Collection Centers, Milk Chilling Centers, Dairy Plants and Milk Testing Laboratories.

Features

- Check majority of harmful adulterants
- Performs 90-100 tests per hour
- Low sample volume
- Inexpensive method for testing of milk purity
- User friendly operations
- Easy cleaning
- No special cleaning reagent required
- Close correlation to accepted standard methods
- Green technology, no hazardous chemical
- Easy to read digital display
- Quick measurement and instant read-out
- RS 232 data output
- Runs on mains or battery
- Online recording of analyses data on SD card

Specifications

Performance Data

Milk type	: Cow, buffalo and mixed milk.
Measuring Speed	: 90 - 100 samples per hour
Calibrated Adulterants	: Urea, Detergent, Ammonium Sulphate, Salt (Sodium Chloride), Soda (Sodium bi Carbonate), Hydrogen Peroxide, Caustic Soda. - Water will automatically reduce the percentage of Fat, SNF, Protein and Lactose. Thus may not be adulterant, as a special case.

Minimum limits of Detection	: Adulterants	Limit of detection %
	Urea	≥0.1 %
	Detergent	≥0.3 %
	Ammonium Sulphate	≥0.2 %
	Salt	≥0.2 %
	Soda (Sodium bi Carbonate)	≥0.3 %
	Hydrogen Peroxide	≥0.3 %
	Caustic Soda	≥0.3 %
Initialization time	: Max 5 Minutes	
Sample temperature	: Milk temperature: 25 °c to 50 °c.	
Sample volume	: 12 ml	
Cleaning	: Easy clean	
Display	: LCD display (4 Line, 16 Character)	
Data interface	: SD Card and RS232	

Installation Requirements

Power supply	: 220 V ± 10% AC, 50 Hz.
Power consumption	: < 40W
Ambient air temp.	: 5 °c to 50 °c.
Relative humidity	: Up to 95%
Dimensions	: W x D x H : 251mm x 194mm x 207mm
Weight	: 10.0 kg

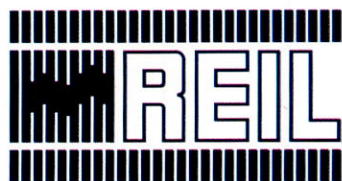
IPR : Patent applied for

Regional Offices

Anand	Bangalore	Bhopal	Chandigarh	Hyderabad	Jaipur	Lucknow	Patna
02692-261794	080-22295783	0755-2418984	0172-2682329	040-27000151	0141-2470784	0522-2719122	9051142562

For further information contact:

Marketing Department, Tel: +91-141-2470784, Fax: +91-141-2470784, E-mail: electronics@reil.co.in



RAJASTHAN ELECTRONICS & INSTRUMENTS LIMITED

(An ISO 9001:14001 "Mini Ratna" Public Sector Enterprise)

2, Kanakpura Industrial Area, Sirsi Road, Jaipur-302 012 (Raj.) India

EPABX Tel: +91-141-2470062, 2470363 Fax: +91-141-2470139

E-mail: reiljp@reiljp.com

Website: www.reiljp.com



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