

# LactoScape FTIR

Milk Analyzer

AOAC and IDF  
compliant



Fat, Protein, Lactose & Total Solids



Milk, Cream, Yogurt & Whey



Accurate & User friendly



Efficient Use of Laboratory Space

Milk Analyzer for Processors & Laboratories

Official Methods:  
ISO/No. 9622/IDF 141  
Uses AOAC approved methodology



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# LactoScope FTIR Mid-IR Dairy Analyzer.



**The LactoScope FTIR Milk Analyzer** *complies with ISO 9622/IDF 141 and uses AOAC approved methodology for the analysis of fat, protein, lactose, and total solids in milk. It's a state-of-the-art*

*instrument, with modern FTIR optics, and simple to use but powerful software. The LactoScope FTIR can test other products such as cream, yogurt and whey thereby increasing its value and versatility.*

**The Delta LactoScope™ FTIR** *incorporates the latest technology based on Fourier transform infrared principles. The instrument's modular construction minimizes the vibration of the FTIR bench and its integrated design provides efficient use of laboratory space. The LactoScope ensures a low cost-of-ownership, minimum downtime, ensured accuracy, and world-class support for every all types of milk producers and users.*

## Providing Industry-Leading Capabilities for Dairy Component Analysis

### Lactoscope FTIR features and benefits

**Auto-Clean and Auto-Zero** automatically maintain sample pumping unit and measuring cell. Reduces the need for maintenance and preparation time. Improves overall reliability and accuracy by consistent, timely cleaning.

**Sample pre-heat** and homogenization standardize the temperature and particle size of the fat globules.

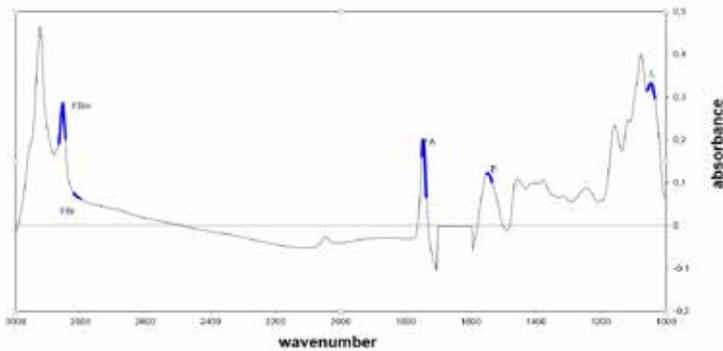
**Full-spectrum** analysis enables quantification of all components.

**Intuitive software** means rapid implementation with minimal training. Calibrations and data can be password-protected. Compatible with LIMS systems.

**Instruments are pre-loaded** with calibrations for all dairy applications. Ready-to-analyze standard products and parameters for fast startup and implementation.



## Complete milk spectrum



### Products

Milk, cream, whey, condensed (milk and cream), ice cream mix, yogurt mix, cheese milk, flavored milk, UHT, WPC.



Milk payment samples.

Optional solid cheese analysis.



### Components

Butterfat, protein, lactose, total solids, SNF

Added water, true protein, casein, NPN/ calculated urea, free fatty acids, pH, citric acid, density, other carbohydrates.

*The inherently stable design of the Dynascan™ interferometer does not require dynamic alignment correction to compensate for errors found in linear mirror movement systems. This field-proven interferometer mechanism incorporates a simple, non-critical bearing for unmatched longevity and reliability.*

## Patented Dynascan™ interferometer FTIR Spectrophotometer

The LactoScope FTIR uses Fourier transform infrared technology based on the PerkinElmer fixed mirror-pair interferometer and collects the complete spectrum of the dairy sample.

The LactoScope FT mid-IR complies with ISO 9622/ IDF 141 and uses AOAC approved methodology for the analysis of butterfat and protein in milk.



## Accessories

We offer a full line of consumables and accessories to ensure optimal system performance.

## Specifications

**Standard parameters:** Butterfat, protein, lactose, total solids, SNF

**Additional parameters:** Added water, true protein, casein, NPN/calculated urea, free fatty acids, pH, citric acid, density, other carbohydrates

**Measuring speed:** 80-120 samples/hour

**Measuring range for undiluted samples:** Fat 0%-55%, Protein 0%-25%, Carbohydrates 0%-25%, Total solids 0%-60%

**Repeatability in general (CV\*):**  $\leq 0.25\%$

**Accuracy typically (CV\*):**  $\leq 1\%$  (bulk samples from cow milk)

**Sample volume:** Typical 10 ml

**Sample temperature:** 2°C to +50°C (36°F to +122°F)

**System dimensions (D x W x H):** 17.72" x 33.46" x 19.70" (45 cm x 85 cm x 50 cm)

**Weight:** 190 lb (86kg)

**Power supply:** 110 V-240V, 50 to 60 Hz, 650 VA incl. PC

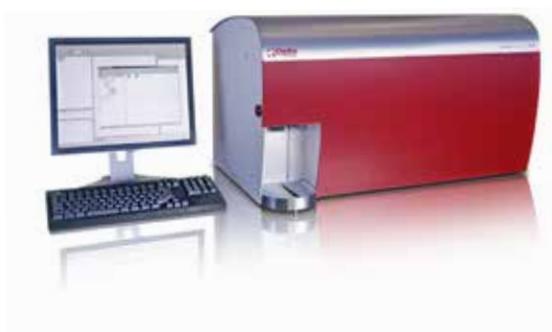
**Standard/approvals:**  EMC directive 89/336/EC,

Low-voltage directive 73/23/EC, Complies with ISO 9622/IDF 141

Uses AOAC approved methodology

\*CV, Coefficient of Variation is equal to the standard deviation divided by the average of the sample tested, times 100. Rose-Gottlieb for fat, Kjeldahl for protein, HPCL for lactose, and oven method for total solids.

[www.perten.com](http://www.perten.com)



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