

# CombiScope FTIR 600 HP

AOAC, IDF,  
NCIMS and FDA  
compliant



## Combined Dairy Herd Improvement & Milk Payment Laboratories

Official Methods:

ISO 9622/IDF 141, 13366-2/IDF 148-2  
Microval certified according ISO 8196-3, 13366-2  
EURL MMP criteria, certificate no 2015LR57  
NCIMS and FDA approved method  
Uses AOAC approved methodology



DELTA INSTRUMENTS IS NOW A PART OF PERTENT INSTRUMENTS

# High volume/High Speed Liquid Milk Analysis for Components and Somatic Cell Counts.

The system consists of:

1. A component analyzer (LactoScope™ FTIR)
2. A somatic cell counter (SomaScope™ LFC)
3. A sample handling system



**The Delta CombiScope™ FTIR 600 HP dairy analyzer** provides the highest sample throughput available for routine analysis of cow, goat, sheep, and buffalo milk.

The system consists of a component analyzer (LactoScope™ FTIR), a somatic cell counter (SomaScope™ LFC), and a sample handling system. This combination can analyze at speeds of **600 samples per hour**.

**The CombiScope FTIR 600 HP** incorporates many industry-first technologies that allows operators to increase lab capacity, throughput, and business opportunities.

## Industry-Leading Capabilities for Dairy Herd Improvement & Milk Payment Laboratories

### CombiScope FTIR 600HP features & benefits

**600 Samples per hour** – The industry's highest speed – increase your throughput profits and provide rapid turn-around to your customers.

**Patented Interferometer** ensures accuracy minimizing maintenance and calibration for component analysis.

**Somatic Cell counter** utilizes a LED light source to eliminate source wear and gains adjustments.

**Conveyor System** incorporates sensor to monitor sample volume and intake temperature. Sample head controlled by electromagnetic drive – there is no wear. Can be used with bar code or RFID coded samples.



## Technology for Success



**Delta and Perten Instruments** are dedicated to developing and implementing technologies that improve our instruments and add value to our customers. In 1989, Delta pioneered the use of Flow Cell cytometry for counting somatic cells. Our latest version uses a dual photo-multiplier along with an LED light source to nearly eliminate operator maintenance.

### Lifetime Warranty

**Our patented interferometer** uses a fixed-point design to scan samples for components. It is maintenance-free and comes with a limited lifetime warranty on the scanning mechanism. Coupled with a maintenance-free diode laser, this scanning system is designed to operate easily and trouble-free for many years.



**Our new sample conveyor** uses multiple sensors to monitor sample quality and can be operated in reverse to easily re-analyze. Our sample head uses no motors, instead relying on an electromagnetic linear drive to eliminate wear and to speed analysis.

**Operator controlled system** is designed to be ergonomically comfortable and user-friendly.

**Intelligent Diagnostic System (IDS)** works with operator to monitor and assess system performance.

**Simple Touch Screen operation** allows for easy start-up and rapid, accurate data handling and transfer.

**AOAC and IDF** – The CombiScope mid-IR method is AOAC and IDF compliant for the analysis of butterfat and protein, and FDA approved for somatic cell counts.



## Specifications

**Products:** Milk

**Standard Parameters:** Fat, Protein, Lactose, Total solids, NPN-CU and Somatic Cell counting\*

**Analysis capacity:** 600 samples/hour instrument speed

**IR principle:** Rotation scanning mechanism, Fourier Transform Infra Red

**Somatic cell counter principle:** LED flow cytometer

**Sample intake:** 6 ml

**Required sample temperature:** +37°C to +42°C (98.6°F to +107.6°F)

**Operating system:** Windows 7

**Operating interface:** Touchscreen, keyboard, mouse

**Data transfer:** UTP

**Weight:** Approx. 727.5 lb (330 kg)

**System dimensions (D x W x H):** 17.72" x 33.46" x 19.70" (45 cm x 230 cm x 50 cm)

**Type:** Desktop

**Power consumption:** 750 nominal 1200 VA Max

**Power supply:** 110V-240V

**IP classification:** IP22

**Standards/approvals:** Complies with ISO 13366/IDF 148-2 and ISO 9622/IDF 141. MicroVal certified according to ISO 8196-3, ISO 13366-2, EURL MMP criteria and the MicroVal Rules and certification scheme v.8. NCIMS and FDA approved method, EMC directive 89/336/EC, 2004/108/EC, Low-voltage directive 73/23/2006/95EC, **CE**, The management system governing the manufacturing of this product is ISO 9001 registered. Uses AOAC approved methodology.

\*Other parameters available upon request

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

