



- Moisture
- Fat or Oil
- Protein

---

# InfraLab™

## At-line Analyzers for Foods Processors

The Measure of Quality™

---

# At-line Measurement

## NDC & the Foods Industry

NDC Infrared Engineering has enjoyed an association with the Foods Industry since the early 1970's. Working closely with our customers, we have developed NIR-based measurements of key constituents, enabling producers to maximize their yield, quality and profitability.

The InfraLab family of At-Line Analyzers has been developed to meet the need for accurate at-line measurement of moisture, fat or oils and protein in a robust, rapid and easy-to-use format.

InfraLab's capabilities mean it can measure a wide range of food products; key application areas include:

- Dairy Powders
- Coffee
- Cheese
- Chocolate Products
- Snack Products
- Wheat and Oats
- Breakfast Cereals

...and many other powders, flakes and granules.

**Accurate analysis of moisture, fat or oil and protein content**  
in less than 10 seconds per sample...

## Speed, Accuracy and Ease-of-Use

Conventional laboratory based methods for determination of moisture, fat or protein in foods are time-consuming, operator-dependent and costly, and may use dangerous reagents.

Other methods make a rapid analysis of a very small sample which may not be adequately representative of the process. The InfraLab provides a robust solution.

NDC's proven NIR (Near Infrared) technology is used at the heart of the InfraLab and is widely accepted as an at-line replacement method for the many routine analyses made in the laboratory.

InfraLab is designed to be calibrated to a laboratory oven or analytical method over the range of interest and, depending on the application, is accurate to:

- Moisture  $\pm$  0.1%
- Fat or Oil  $\pm$  0.3%
- Protein  $\pm$  0.2%

## MEASURABLE ADVANTAGES



- **Speed** - InfraLab completes each analysis in less than 10 seconds
- **Precision and Repeatability** - InfraLab makes over 125 complete measurements per second for maximum resolution
- **Ease of Use** - with automated sample detection and minimal sample preparation, InfraLab has no special skills requirements
- **Hygienic Design** - InfraLab is easy to keep clean and is sealed to IP63 (optionally to IP65)
- **Intuitive Interface** - the InfraLab User Software has been designed for ease of access to the data generated by the analyzer
- **Data Analysis** - the Calibration Management Software (optional) ensures the statistical validity of calibrations and the trending function enables a quick visual interpretation of process data

**InfraLab is a viable and cost-effective alternative to traditional laboratory methods for the measurement of moisture, fat and protein in a wide variety of food products**



# Performance combined with Ease of Use

**Fully functional in its own right, or connected to a PC running the InfraLab Product Manager Software**, fast access to critical data has never been easier...

## InfraLab - Two Formats, One Performance Level...

### InfraLab Analyzer

Its easy-to-use touchscreen and clear displays make InfraLab ideal for both production and routine QA environments.

The intuitive interface enables the supervisor to control each operator's access, from simply having the ability to log on and make measurements, right up to full administration rights with the ability to set up new products and change existing settings.

Measurement data can be downloaded to PC using NDC's GaugeToolsXL software at any time, or when its large on-board storage capacity of 1,000 sample records is reached.



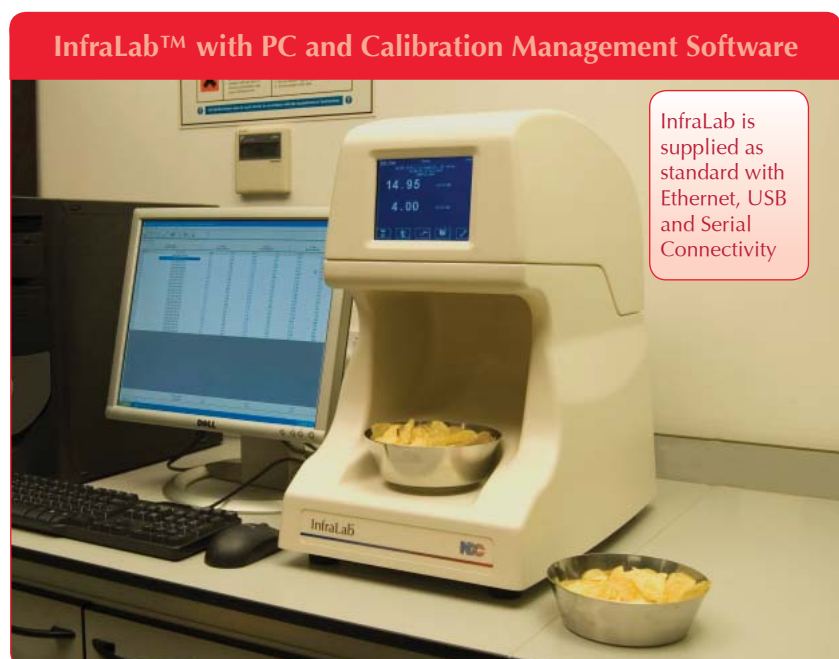
**Routine use of the Infralab requires no special skills, guaranteeing fast and accurate testing for every sample**

### InfraLab plus PC and Calibration Management Software

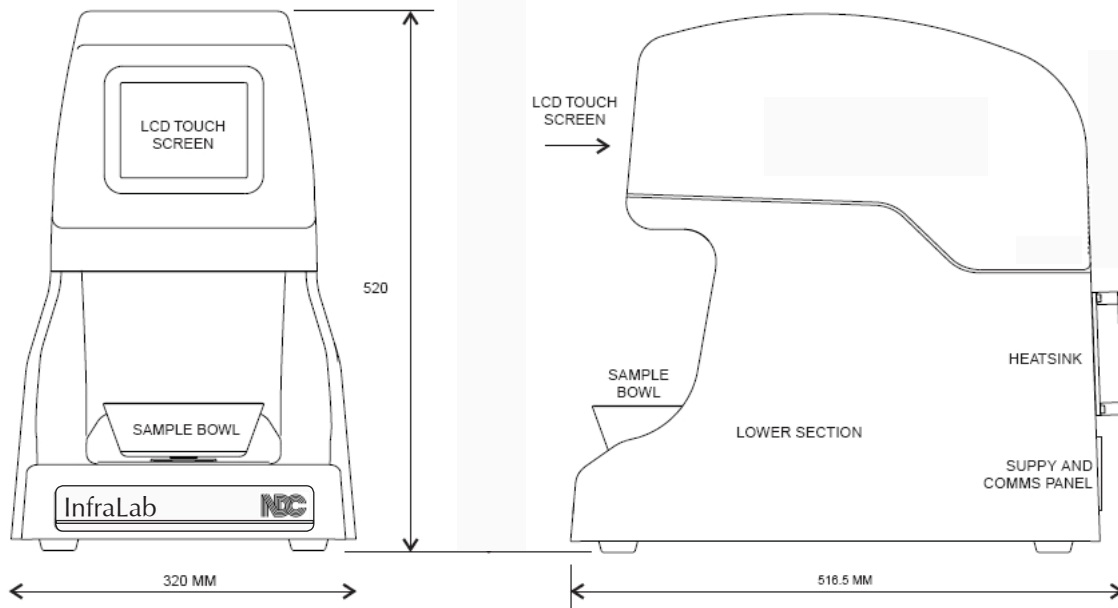
creates a format with advanced data storage, visualization and analysis capabilities.

InfraLab connects via its USB, Ethernet or Serial connection to the PC, to open up a wider range of functions and options, including managing the analyzer remotely.

With the PC, data storage capabilities are limited only by the hard-drive, enabling users to gain deeper insight into the validity of the data by tracking measurement values product by product over long time periods.



# Technical Specifications



## Weights and Dimensions:

Weight: 15kg (33lbs)

Dimensions 320 x 503 x 517mm (12.6 x 19.8 x 20.4in)

Sample Bowl: 140mm diameter x 50mm deep (5.5 x 2 in)

Smaller Capacity Bowl: 140mm diameter x 13mm deep (5.5 x 0.5 in)

## Sampling:

Measurement Time: Configurable 2-10 secs

Automatic Sample Detection: Configurable off/on

## Environment:

Environmental Rating: IP63 (IP65 optional [NEMA 4])

Operating Temperature: 0-40°C

Operating Humidity: up to 90% non-condensing over the operating temperature range

## Power:

Power Supply: 85 to 264V RMS AC 45-66Hz

Consumption: 42W

## CE Compliance:

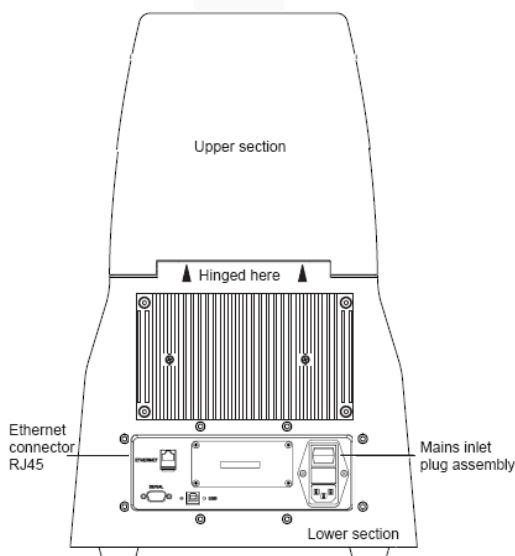
EN61326 (2001) EMC & EN61010-1 (1993) LVD

## Connectivity:

Serial RS232, Ethernet TCP IP, USB2

## User Software Features: (without PC)

- User log-in and access permissions settings
- Product calibration management
- Data storage: 1,000 sample files (up to 3 components each)
- Data Export: to PC via USB using NDC GaugeToolsXL s/w



NDC Infrared Engineering is represented in over 60 countries worldwide

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

ISO9001:2000

### NDC Infrared Engineering Ltd

Bates Road, Maldon  
Essex, CM9 5FA  
United Kingdom

Tel: +44 1621 852244

Fax: +44 1621 856180

Email: [sales@ndcinfrared.co.uk](mailto:sales@ndcinfrared.co.uk)

### NDC Infrared Engineering Inc

5314 North Irwindale Avenue  
Irwindale, CA 91706  
United States of America

Tel: +1 626 960 3300

Fax: +1 626 939 3870

Email: [info@ndcinfrared.com](mailto:info@ndcinfrared.com)

### NDC China

Tel: +86 20 8666 2790

Email: [info@ndcinfrared.com.ch](mailto:info@ndcinfrared.com.ch)

### NDC Germany

Tel: +49 1801 977112

Email: [info@ndcinfrared.de](mailto:info@ndcinfrared.de)

### NDC India

Email: [ndcindia@ndc.com](mailto:ndcindia@ndc.com)

Tel: +91 20 2543 5768

### NDC France

Tel: N° Azur: 0810 600 400

(prix d'un appel local)

Email: [info@ndcinfrared.fr](mailto:info@ndcinfrared.fr)

### NDC Japan

Tel: +81 3 3255 8157

Email: [info@ndcinfrared.jp](mailto:info@ndcinfrared.jp)