



InfraTester Model IT02



InfraTester Model IT02

(shown here with the optional JEFFCO InfraSpector Vis/NIR Spectrometer, Touch Controller & Sample Presence Detector)

A flexible, general purpose sample presentation system optimised for near infrared spectroscopy

- * Variable large or small sample sizes
- * Samples can be wet, dry, powder, fibrous, liquid, paste, grains, meat etc
- * Compatible with most brands of reflectance spectrometers
- * Direct top surface reading with no windows to foul or interfere with NIR spectra: negligible cross contamination
- * Fast, accurate, compact & economical
- * Simple controls for speed & compression
- * Optional sample sensor for triggering
- * Optional Touch Controller with laser barcode reader
- * A great companion for the JEFFCO InfraSpector Vis/NIR Spectrometer
- * Easy to operate, clean and maintain
- * Compact and portable for laboratory or field operation
- * Uses patented ASAS technology
- * Designed & made in Australia

Over recent years, near infrared spectroscopy has made big advances in accuracy and stability, becoming a tool that has moved from the research laboratory into general use. But all involved with NIR technology admit that sample preparation and presentation are major issues if accurate and repeatable reflectance measurements are to be made, especially on non-homogeneous materials. Most sample presentation systems to date have been proprietary and designed for a single purpose, making it difficult for researchers to trial new NIR applications easily. There is now a neat and economical solution.

offering a simple way of trialling new ideas quickly, and economically processing the many samples required to establish a calibration set. Depending on the options chosen, sample sizes can vary from a few grams to ten kilograms allowing good statistical methodologies to be applied. The ability of the **InfraTester** to run large numbers of samples speedily and automatically makes it very suitable for generating useful data in the shortest time.

allow direct use of sample material in a compartmented fashion. This provides flexibility in sample sizes and allows for wet or liquid samples. Optionally, the **InfraTester** is able to automatically detect the presence of the sample just prior to the NIR spectrometer position and provide a trigger signal to control scanning in the spectrometer.

An optional laser barcode reader sends identification details to the computer for fast easy tracking of samples for correlation with NIR spectra.



 **InfraTester Model IT02**

The **JEFFCO InfraTester Model IT02** is a flexible, general purpose sample presentation system for reflectance spectroscopy,



Compression Plate

The patented compression plate makes short work of fibrous samples such as fibrated forage, grasses and sugar cane whilst a number of sample trimmers can prepare all types of materials for analysis. The conveyor belt is of unique design to



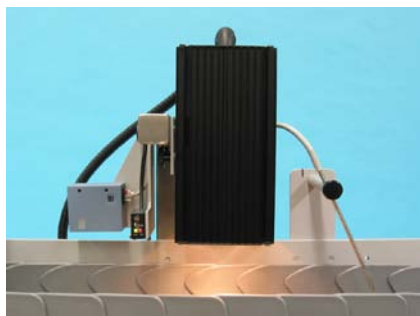
Applications limited only by your imagination

No matter what your potential application, the **InfraTester** will provide you with convenient, economical and fast sample presentation to keep you ahead in NIR spectroscopy.



The simple but comprehensive Control Panel

The **JEFFCO InfraTester Model IT02** includes a simple Control Panel to allow fast setup and easy operation even by non-technical personnel. But if you want to have computer control with automated sample tracking, scanning control and touch screen operation, then ask about the optional Touch Controller and **JEFFCO InfraSpector Spectrometers**.



Choose your own preferred NIR Spectrometer

However, the **InfraTester** was designed to be used with almost all NIR reflectance spectrometers. Just seek our advice first to confirm compatibility.



Sample Sensor and various Sample Trimmers



Conveyor belt with optional segmentation showing short and long sample trays

The unique and patented conveyor system of the **InfraTester** is designed to be adaptable for continuous direct carriage of sample material or compartmented operation with sample trays.



A versatile system for versatile applications

*** Potential Application Areas:**

- Sugar Cane Parameter Analysis
- Wine and Grape Research
- Cane & Grape Payment Systems
- Protein Determination
- Fodder Constituent Control
- Meat Analysis
- Human and Animal Nutrition
- Pharmaceuticals
- Fruit Quality and Ripeness
- Mineral Sample Analysis
- Plant Variety Testing
- Waste Processing
- Dairy Products Research
- Paper Pulp Manufacturing
- Pet Food and By-product Analysis

The **InfraTester** is designed and manufactured in Australia to the highest quality standards for a long and trouble-free life.

SPECIFICATIONS

- * Construction:**
Powder-coated steel/aluminium, stainless steel and polypropylene
- * Power Requirements:**
AC Supply: 90 - 260 Volts
Frequency: 50/60 Hz
Current: 3.0A max
Optional: 12 VDC
- * Motors:**
Type: DC Permanent Magnet
Control: PWM, Variable Speed
- * Conveyor System:**
Proprietary design
Heavy duty polypropylene
Field-adaptable layout
- * Optional Touch Controller:**
Powerful touch screen PC
Intel processor
OS: Windows 7
Interfaces: USB 2.0 x 3, LAN, 802.11g Wireless, Bluetooth
10" LCD screen
- * Other Options:**
Sample Trays (short, medium, long)
Laser Barcode Reader
Infrared Sample Sensor
Segmented Conveyor Belt
Compression Plate Module
Sample Trimmer: Vee Plate
Sample Trimmer: Pressure Plate
Sample Trimmer: Roller
Wheeled Trolley
Polypropylene Disposal Bin
Spectrometers & Software
- * Machine Dimensions:**
IC01 Bench Top:
1450 W x 500 H x 505 D (mm)
Net Weight: 51 kg
Optional Wheeled Trolley:
1450 W x 1125 H x 505 D (mm)
Net Weight: 6 kg

Patents: Australia 752019: USA 6,739,209: South Africa 2002/0919: (others pending worldwide)

Distributed by:



Our Australian Manufacturing Plant

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